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CIVIL PROTECTION, THE PROTECTION AND RESCUE SYSTEM[1], THE SYSTEM FOR PROTECTION AGAINST NATURAL AND OTHER DISASTERS - DEVELOPMENT AND PLACE IN THE NATIONAL SECURITY SYSTEM

(WITH AN EMPHASIS ON THE CASE OF SLOVENIA)

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[1] Through out the text reader should be aware of the fact that terms "The Protection and Rescue System" and " The System for Protection against natural and other disasters" are word for word translations from Slovenian language. I am using this wording because it is widely used in translation of official Slovenian documents. English terms would be *integrated emergency services system* for "The Protection and Rescue System" and *disaster management system* for "The System for Protection Against Natural and Other Disasters".

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INTRODUCTION

Addressing national security systems lies at the very heart of what defence science deals with. Like all other social phenomena, national security systems are also subject to changes, and it is therefore necessary to investigate them continuously. I believe that the causes for these changes can be sought foremost in the changes in significance between various sources of threats to the values that the national security system protects. Changes on the scale of more or less threatening factors are connected with changes in the security position of the state and the perception of these changes in society. In my view, from the 1980s until today a great many such changes have come about, particularly in Europe. It is of interest here to look at change in one part of the national security system in particular, in its "civil part". It is exactly this part of the national security system that is the most difficult to define. It seems to have been the most subject to change during the time under consideration. This paper will attempt to define and position it more precisely, but for now let a negative definition serve: what I have in mind is not that part of the national security system that carries out the function of military defence, nor that part that carries out the function of internal security in the narrower sense (police, judiciary agencies, etc.). What then remains to discuss? It is the grouping in which the terms *civil defence*, *civil protection*, *protection and rescue*, and *protection against natural and other disasters* apply. Here I wish to clarify these terms and give them content – and to position that content in the national security system within the framework allotted.

In section one I define part of the basic concepts that are used in this study. I define security and national security, and deal briefly with the social system and subsystems.

This leads to section two, where I deal with two models of the national security system that can serve as a point of departure for investigating the positioning of the function of protection and rescue.

Section three explains the relation between the concepts of civil protection, civil defence, and protection and rescue. Without a historical overview of the development of the function of protection and rescue, it is difficult to explain this concept clearly.

Accordingly, the explanation of concepts and historical development from section three makes it possible to formulate a model of the national security system, which I present in section four, as well as the position of the function of protection and rescue in it.

No social system can function unless it is legitimate in the eyes of its society. To receive legitimacy, it requires its social *raison d'être*. The end of the Cold War brought about the loss of the source of legitimacy for everything that based its existence on the confrontation between the two opposing blocs.

Section six shows what I feel is a national security system for a modern state – once more, of course, with the wish to secure a position for protection and rescue in it. However, this model no longer speaks of protection and rescue, but rather of the development of this function in a new quality.

Section seven was intended to show how the contemporary disaster management system in Slovenia is like but instead of presenting something what is well documented in English language and easily available through the internet I decided to present how system is build and how it works in the biggest Slovenian municipality – Ljubljana.

Last section is devoted to conclusions and recommendations. We have to bear in mind that it is difficult and often dangerous to draw general conclusions from the specific case.

Most of the content of first six sections, in its basic form, I wrote for Administration for Civil Protection and Disaster Relief in August 2001. Text in section eight is based on my presentation of the Ljubljana's disaster management.

1 DEFINING THE CONCEPTS OF SECURITY, NATIONAL SECURITY AND THE NATIONAL SECURITY SYSTEM

1.1 SECURITY

This paper proceeds from the basic hypothesis that security is one of the fundamental preconditions for the existence, normal operation and development of people within their biological (or physical), psychological (or spiritual as it is modern to say nowadays) and social dimensions, as well as of social groups and social organizations. In other words: security is a necessary condition for the operation and development of a human being as an individual, of civil society and of the state. As biological beings, people have various mechanisms for ensuring their security: the skin, which represents a shield against physical, chemical and biological influences from the environment, the immune system, and so on. In their psychological dimension people also have many mechanisms that provide for their security (Larsson and Osterdah 1996; Musek 1994). Biological security mechanisms in particular have been acquired through evolution. They are inherited by an individual and are not the result of direct conscious human endeavours. However, through their development, people in their social dimension have themselves, through their conscious strivings, developed various methods for ensuring their security. Through time these methods have become differentiated and depend on the level of development of the civilization in which the particular society exists. It is this conscious human striving and activity to establish, preserve, and raise the level of security and the forms in which this activity is expressed that is the subject of this study in its broadest sense.

First consider some definitions of the concept of security. Milan Vršec believes that "under the concept of security in its broadest sense are understood those circumstances, relations, and conditions of social life and work that make possible and ensure uninterrupted (i.e., unimpeded) productive, creative, and social activities, and that block internal and external dangers that could threaten the preservation of fundamental social values" (Vršec, 1988: 16). Igor Kotnik says that "the concept of security is used to indicate a state of absolute stability in the system being observed (which does not imply that it is static) when, in its operation due to various natural or social internal and external systemic influences, it is not disturbed in any of its functions. In the narrower sense, the security of a society is the result of human activity, the goal of which is to ensure for human existence and the existence of the society the most optimal situation in the environment – both natural as well as social – in which the individual or society exists. The first part of the definition is general, because one can also include in it the very specialized category of technical systems security, far removed from social science. The second part of the definition clearly moves to the social level, where the fundamental member of society – the human individual – cannot be forgotten" (Kotnik 1993a: 174). Anton Grizold presents multiple definitions of the concept of security. In the first he says that "security in its broadest sense represents a state of stability in nature and society, in which – due to prior preparation for protection and defence against sources and types of threats – these do not create an imbalance in society and nature that would threaten people's physical and/or social and spiritual integrity. Today, therefore, security is not a matter of the inactivity of existing and presumed sources of threats in nature and society, but at the same time of planning activity through which a society can ensure the security of its members and the nature. In the circumstances of civilization that exist today, security has a universal content, which clearly expresses itself primarily in the totality of its encompassing and interweaving of all areas of life and work in a society (economic, political, social, military, etc.) as well as in the connections

and interdependency of all living creatures and the environment on this planet (Grizold 1991: 15). In his second definition he says that "security is the quality of the condition in which the equilibrium of the physical, spiritual and material development of the individual and social community is guaranteed in relation to other individuals, social communities and the nature, as well as the particular activity that ensures the establishment of this condition" (Grizold and Korošec 1992a: 9). In other words, "Security can be defined as a condition in which the balanced physical, spiritual and material existence of the individual and social community is guaranteed in relation to other individuals, social groups and the nature (Grizold 1992b: 63). In his third definition he mentions that "security is an intrinsic structural element of society that encompasses both a condition or the specific quality of that condition as well as an activity or system. Security thus applies both to a society or state as a whole – that is, national or internal and external security – as well as to the international community, where one refers to international, world or universal security" (Grizold 1992b: 63).

Ljubica Jelušič, relying primarily on Samuel P. Huntington and Albert J. Edmonds, speaks about differentiating between security as a means and security as a goal, or about security as a means of ensuring social values on the one hand, and security as a goal of social development on the other. On the one hand, this therefore concerns the concept of security as a feeling of security, and on the other as a mechanism for ensuring security. Jelušič says that the concept of security is based on a perception, on feelings, which means that security does not exist in a material form, but rather is that which individuals or groups perceive to be such. At the same time, this means that it is possible to strengthen this perception through various psychological approaches or simply through material facts (Jelušič 1997: 70–71).

The security of modern societies is conditioned by factors in five fundamental areas: military, political, economic, social and ecological. In general, military security applies to mutual relations among the military (both defensive and offensive) capabilities of a state and to the recognition by a state of the intentions of other states. Political security applies to the organizational stability of a state and its system of government and ideology, which ensures legitimacy. Economic security is tied to the question of access to raw materials, financial sources and markets, which ensure the maintenance of a suitable level of prosperity and the power of the state. Social security relates to acceptable conditions for the development of language, culture, religion and national identity as a whole. Ecological security foresees the preservation of the local and global biosphere as the basic system that is the condition for all other human activities (Buzan, cited in Grizold et al. 1999: 9).

Not to depart from these definitions, in a more precise analysis it can be ascertained that their authors believe that security refers to conditions or circumstances of no disturbance, balance and stability, and equilibrium that make possible the existence, operation, integrity and development of the individual, social community and nature. The authors also describe the extensiveness of security: security in the physical, social and spiritual sense for the individual, while at the level of the social community they mention national security, internal security, external security, international security, and economic, political, social and military security. Also important here is the observation that security can, on the one hand, be treated as a goal or as a sensation of security, and on the other hand as a means or as the result of planned human activity through which a society ensures the security of its members and the nature.

Security is thus a holistic phenomenon that concerns people in all of their dimensions. As social beings in social groups and organizations, people formulate measures for that which is non-security, and for that condition which they feel to be a condition of security, and they establish

mechanisms for ensuring security, for organizing preventative action against dangers and for reducing the consequences of threats, and mechanisms for organized actions against the consequences that threats bring, all of this depending on the level of social development. In this sense, security is interesting as a planned human activity, particularly for ensuring security as a function of the state.

1.2 NATIONAL SECURITY

To deal with the concept of national security, the field of attention is narrowed and a more precise definition of the subject at hand is gradually approached. Grizold (1992b: 63–66) and Marjan Malešič (1994: 57–68) offer a brief overview of the definitions of national security by various authors.

The concept of national security, says Malešič (1994: 57), is "to be frank ... primarily an American concept." Compare, therefore, what is written about national security in *The Official Dictionary of Military Terms* (1992: 244). It should be mentioned that the symbol DOD stands alongside the expression *national security*, which means that the expression is used officially by the United States Department of Defense, and not NATO. The comments on the concept are:

> A collective term encompassing both national defense and foreign relations of the United States. National security is the condition that provides:
> a) A military or defense advantage over any foreign nation or group of nations;
> b) A favorable foreign relations position;
> c) A defense posture capable of successfully resisting hostile or destructive action from within or without, overt or covert.

It can be observed that such a definition of the concept of national security through a source of threats to security emphasizes the military and terrorist-related form of threats to national security, whereby the origin of threats may lie within the state or outside it (although the emphasis is on external military threats). In their content, definitions may also emphasize only the external military threat as the source of threat, or may seek the source of the threat to national security so broadly that they include every significant threat to the normal operation of the state. In his analysis of the definitions of national security, Malešič observes that "if one takes into account the chronology and extensiveness of their content, the definitions of national security presented can be divided into classical (war as a threat), modern (war is not the only threat) and alternative (war is less and less a threat, and different forms of threats are appearing that a military organization is either unable to master, or can only do so in part)" (Malešič 1994: 68).

For the present needs, the definition can be adopted that "national security concerns the endeavours of a modern state to ensure the security of every member of society against threats from outside (intervention, attacks, occupation, blockades, etc.) and inside the society (threats to law and order, criminality, antisocial and pathological behaviour, threats to individual and collective human rights, etc.). Modern national security is firmly tied to the international environment, where the responsibility for ensuring broader international security is seen to be held not only by the state and its alliances, but also by the entire international system" (Grizold and Ferfila 2000: 3). "The lowest common denominator for the security of all states is the preservation of their own territory, of economic, political and social order, and of their way of life" (Grizold and Ferfila 2000: 4).

It should also be emphasized that the concept of national security will be used as a general concept for indicating the content and activity for ensuring security at the state level. Admittedly, this equates the concept of national security with one of the extensions of the concept of state security and neglects the specific relationship between national and state security.

1.3 THE SOCIAL SYSTEM AND SUBSYSTEMS

Proceeding from Niklas Luhmann's theory of social systems, an attempt is made here to define the origin and concept of social systems. The development of a society also encompasses changes in the method of social differentiation. The first forms of social differentiation took place in the form of segmentation, which was primarily an effect of the circumstances in the environment. Along with development came the formation of the traditional stratified society, which separated into different strata or classes (as subsystems), the inequality of which arose from differences in wealth and power. In this system, equality appeared within specific classes, and the hierarchical structure of these societies made possible the legitimisation and representativeness of the entire traditional society in one of its parts: at the top of the hierarchy, in the highest class. Structural changes at the end of the 18th century made society increasingly less stratificationally differentiated and increasingly more functional. Here functional differentiation means that social subsystems began to be assigned their own special function, and they became functional systems (Kokot 1991: 9–19). "If the principle of the self-selective formation of a system in the preceding methods of differentiation was based on equality (i.e., segmentation) or inequality (i.e., stratification), functional differentiation in its own way included both methods – inequality, inasmuch as no functional system is able to substitute for (i.e., carry out the function of) another, yet at the same equality, because in the conditions of functional differentiation there must be equal by all to each functional system" (Kokot 1991: 13). On the basis of this it is possible, for the purposes of this paper, to uncover the following suppositions: that a social system is composed of subsystems, that subsystems are a component part of the broader system, that subsystems have a specific function in the social system that is different from others, that there therefore exists some boundary between different systems with different functions, and that communication exists between social subsystems, which forms the essence of a social system.

1.4 ENSURING SECURITY AS A FUNCTION OF ONE OF THE SOCIAL SUBSYSTEMS

With the development of a society (or with functional differentiation in a society), security as an activity separates itself from other activities and functions in the society, and is concerned with two types of relations that can constitute a threat to the society:

- Relations between people or social groups;
- Relations between people and the nature, or between society and nature.

Both types of relations can be divided into two component parts:

- The temporary reaction of persons (or society) to a condition or processes in nature and events (or phenomena) in society that they believe represent threats;
- Human recognition of threatening natural and social phenomena and processes, and preparations for protection against them (Grizold at al. 1999: 7).

At today's level of high functional differentiation and, at the same time, interdependence in society (and between societies), such broad conceptualisations of security as an activity ought

to connect, include or extend into all social subsystems in an organized manner, or be a component of all social subsystems. However, "[R]ationality, effectiveness and respect for the rights and freedoms of individuals and groups in satisfying their needs in society condition the systemic arrangement of every social activity on its own. ... The system is thus an external (or empirical) expression of the orderliness of a specific activity in society, with which the essential need of the entire society is satisfied" (Grizold et al. 1999: 7).

Security as an activity thus proceeds through the security system of a society, in which can be differentiated its functional aspect (types and forms of activities) as well as its institutional or structural part (organization, sponsors of activity, etc.). "A synonym for the security system at the state level is the national security system ..." (Grizold et al. 1999: 8).

2 STRUCTURAL ELEMENTS AND THEIR FUNCTIONS IN MODELS OF NATIONAL SECURITY SYSTEMS PRIOR TO THE END OF THE COLD WAR

To narrow the focus, what is of interest here is not the position and interaction of the national security system within the social system, but instead ascertaining which functions (types and forms of activity) manifest themselves in models of national security systems and what their structure is like – that is, which structural elements are represented and what their mutual organizational connection is like. It is anticipated that changes have occurred here in the past twenty years, and this investigation will therefore begin with a model intended to reflect the time prior to the end of the Cold War.

During the Cold War, national security systems reflected the response by societies for what was essentially a single danger that ranked highest on the scale of threats, because it threatened destruction of apocalyptic proportions – the menacing danger of a conflict between the two opposing blocs, total war, and the use of nuclear weapons. If this danger was described as total, it is then understandable that it was possible to respond to such a danger and to prepare for its outbreak only in the same measure: totally. This was no longer a matter of whether the navy of one state would destroy the navy of another state, nor whether the armed forces of one state (or group of states) would engage in total conflict with the armed forces of another state in order to incapacitate them and take their territory.[2] The danger that threatened during the Cold War was the destruction of society, and it is therefore understandable that the response to this danger also demanded the engagement of the potential of the entire society.

2.1 THE NATIONAL SECURITY SYSTEM – MODEL 1

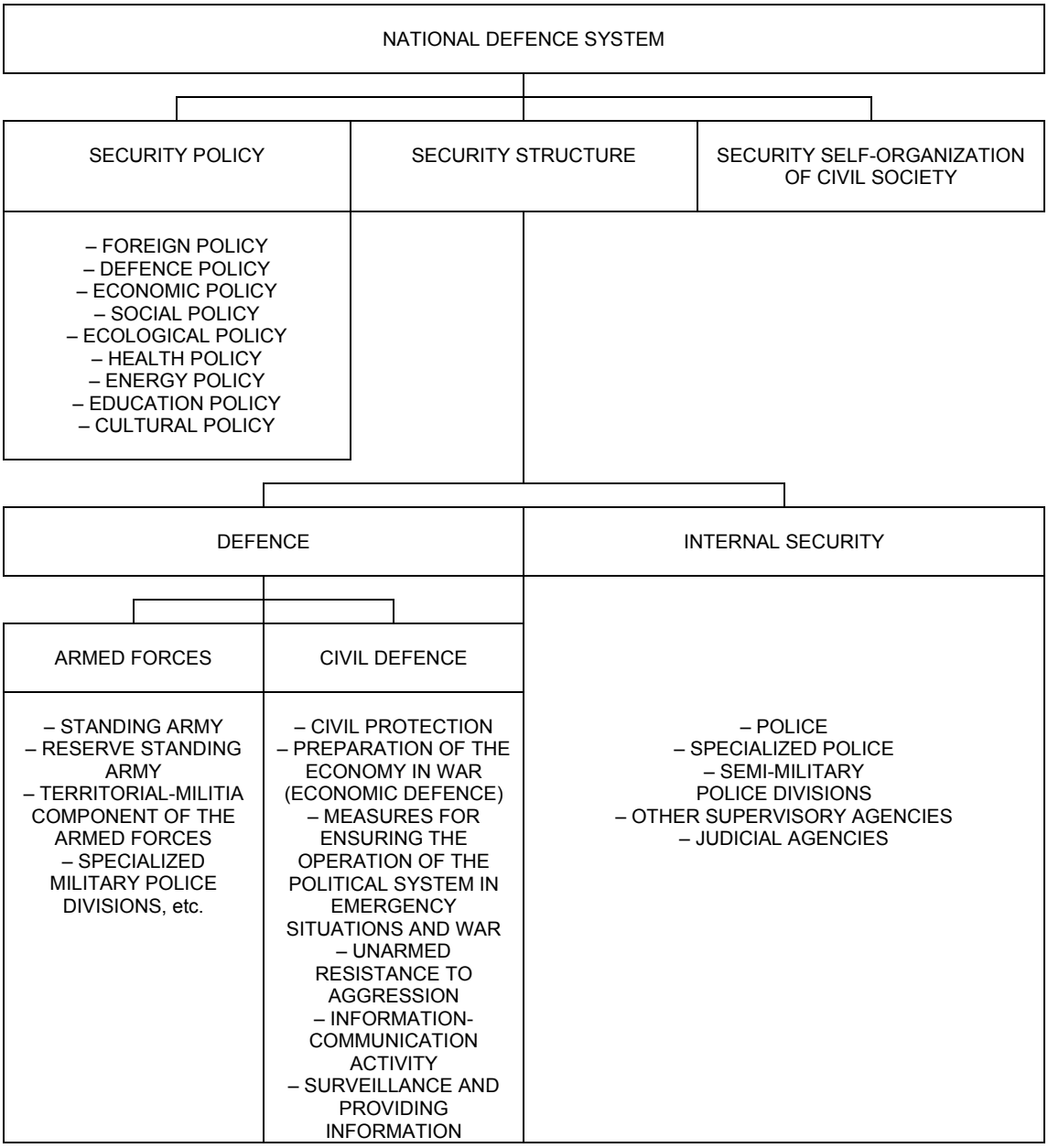
Grizold (1992b: 68–69) defines the national security system as "the efforts of a society to ensure security in the broadest sense for its members. The fundamental elements of a national security structure are the operative activities of the society that guarantee its security." The fundamental elements of a national security system, as Grizold (1992b: 69) lays them out, are

[2] In order to illustrate the kind of drastic changes in thought and organization referred to here, it is illustrative that before World War Two states (with the exception of Germany) did not actually have a working central organization (i.e., a ministry of defence) that would have been responsible for preparing the entire armed forces (i.e., infantry, navy, air force) in a planned fashion for engaging in armed conflict. The institution of the Department of Defence was instituted in the US only after the adoption of the National Security Act of 1947. This was gradually followed by other states: Italy in 1947, the Soviet Union in 1953, France in 1959, and the United Kingdom (in its fully effective sense) only in 1963 (Edmonds 1988: 173–175).

shown in Figure 1. Of greatest interest is that part which the author calls the security structure. Consider how Grizold (1992b: 70) defines security structure, functions and the structural elements for carrying out functions:

> The security system is a structure dedicated to guaranteeing security at the level of the entire society, and is specific to each state; for the majority of states, there are two elements joint of this system, namely: defence and internal security.
>
> The functions of defence are:
>
> – The deterrence of possible aggressors;
> – The defence of one's territory against possible aggression;
> – Protecting the population and material goods, and addressing the consequences of aggression;
> – Unarmed resistance to aggression;
> – The operation of political and other social subsystems during war, etc.
>
> To realize the functions enumerated here, the defence element of the security system of the state has two fundamental structural elements:
>
> – The armed forces and
> – Civil defence.
>
> The functions of internal security (in peacetime and war) are:
>
> – The preservation of law and order;
> – "Information" activity;
> – Protection of the entire social infrastructure.
>
> The structural elements for carrying out the functions of internal security are:
>
> – The police;
> – Other supervisory agencies;
> – The judiciary system.

FIGURE 1: BASIC ELEMENTS OF THE NATIONAL SECURITY SYSTEM



Source: Grizold (1992b: 69), adapted to Grizold et al. (1999: 10).

2.2 THE NATIONAL SECURITY SYSTEM – MODEL 2

Kotnik (1993b: 184) defines the national security system as a "social subsystem, the role of which is to ensure national values". "In a society," says Kotnik (1993b: 184), "there exists an entire range of systems; for example, political, economic, educational, and social security systems. Each commands a specific part of social events through ensuring the basis for their operation, through direct supervision and through corrective intervention in the events. Among these, it also necessarily comes to interaction .... One such system is also the national security system, which is one of the most important social subsystems, because it ensures one of the basic conditions for the existence of every system – that is, security. The national security system has the role of a bordering social system that prevents the uncontrolled entry into and

operation of threatening factors from the environment in the social system or limits the development and operation of threatening factors in the social system itself." Kotnik (1993b: 185) emphasizes that "the national security system is not uniform, but one can speak of three clearly expressed and recognizable subsystems:

– Protection;
– Defence;
– Security." (Figure 2)

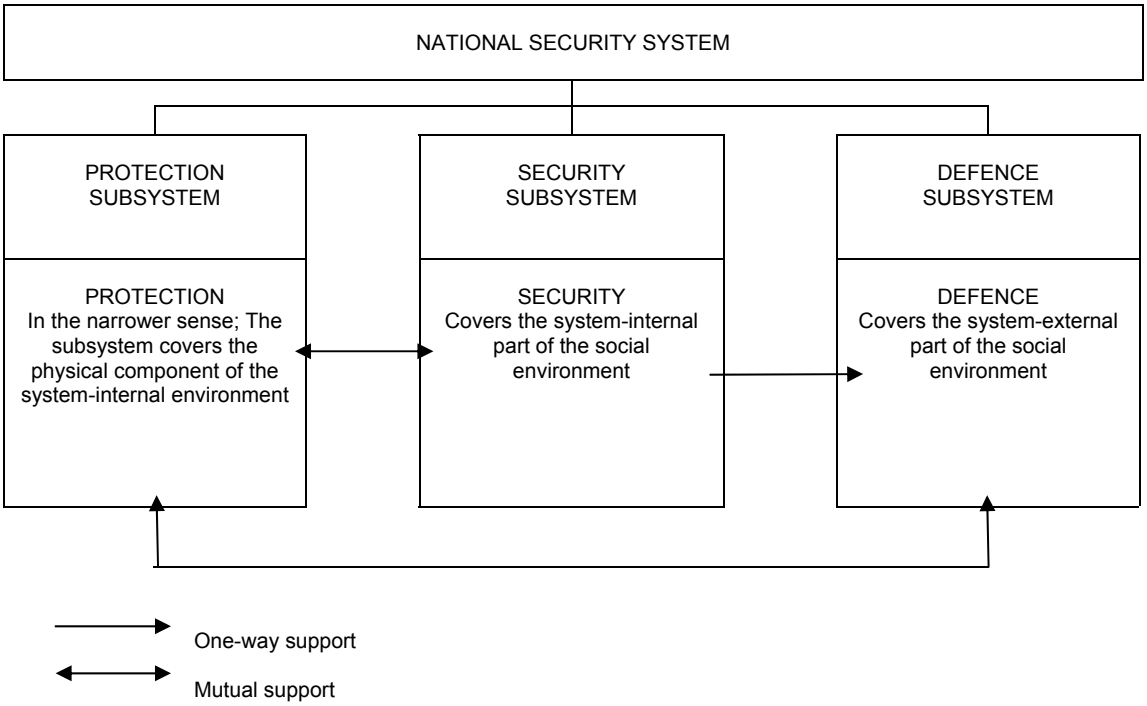
Each of these covers a more narrowly defined area of advance preparation and operation, the goal of which is to protect the society from threats, which means that interaction among them is not only desired, but even necessary.

The protection subsystem covers the physical component of the system-internal environment (that is its primary task, beyond which it also operates as needed as a supporting and complementary element in the operation of the other two subsystems), and its task is the protection of the society (in the narrower sense).

The defence subsystem covers the system-external part of the social environment (that is its primary task, beyond which it participates as needed as a complementary element in the operation of the protection subsystem, although it may not operate in the work of the security subsystem if the society wishes to preserve its characteristic of democracy), and its task is the defence of the society.

The security subsystem covers the system-internal part of the social environment (this is its primary task, beyond which it participates as needed as a complementary element in the operation of the other two subsystems), and its task is the security of the society (Kotnik 1993b: 186).

FIGURE 2: THE NATIONAL SECURITY SYSTEM – MODEL 2



Source: adapted from Kotnik (1993b: 186).

2.3 A COMPARISON OF MODELS 1 AND 2 OF THE NATIONAL SECURITY SYSTEM

It can be concluded that Kotnik treats the issue more narrowly than Grizold. That which Kotnik treats as the national security system is, in Grizold's analysis, the security structure in the national security system. Here the author agrees with Grizold and believes that it is necessary to address both the security policy as well as the security self-organization of civil society in the treatment of the topic. In the model it is necessary to put greater emphasis on the dimension of the national security system, which expresses itself in concrete form in the inclusion of the state in international organizations and mechanisms for ensuring its security, and in tasks (prepared and carried out) that states entrust to the structural elements of the security component in order to realize their obligations in the international community. Grizold also treats the security element, in its narrow sense – which Kotnik calls the security subsystem – more broadly than Kotnik. Here the author also agrees with Grizold. In his treatment of the defence element, Grizold includes in it the armed forces and civil defence. Kotnik, however, introduces a new subsystem in addition to the defence subsystem, which he calls the protection system. If Kotnik's concept were translated into Grizold's language, the security structure would be like this:

- Internal security;
- Defence or external (defence) security with:
  - The armed forces and
  - Civil defence, as well as
- Protection and rescue.

It is exactly because of the introduction of this subsystem that Kotnik's model is so interesting. The author agrees with the introduction of the protection subsystem into the model of the national security system, and the remainder of the study will attempt to seek out as many reasons as possible for this. In Grizold's concept, it is necessary to exclude at least the structural element of civil protection from civil defence and to add the medical rescue service, the fire department rescue service and other public rescue services, and to formulate an independent subsystem called the protection-rescue subsystem.

3 A QUANDARY OF TERMS: CIVIL PROTECTION, CIVIL DEFENCE, PROTECTION AND RESCUE: WHAT'S WHAT

In the material examined so far, three concepts have been encountered, which were already mentioned in the introduction: civil protection, civil defence and protection and rescue. Before continuing, the relation between these concepts must be clarified. First of all, here are some definitions of civil defence by various authors:

Sukiennik believes that "[u]nder today's circumstances, the concept of civil defence is understood to include the entirety of preventative and relief activities, the goal of which is to ameliorate the consequences of the destruction caused by military operations and to reduce the loss of the civilian population that occurs as the result of aerial attacks on the territory of the states that are at war. In addition, civil defence is responsible for organizing and carrying out effective relief actions in the event of natural disasters and catastrophes during peacetime" (cited in Malešič 1992: 128).

"The concept of civil defence is understood to include the activities of planning, preparing and carrying out all civil measures of a society that contribute to the development and maintenance of the defence-protection capability of a society, including the achievement and maintenance of the highest possible level of security for people, the natural environment and society, as well as effectively carrying out the protection and rescue of people, material goods and other values in the case of threat through non-military methods and means in peacetime, emergency situations and war" (Bešker 1992: 162).

"The civil defence system is part of the defence system of the state that is organized, equipped and trained to carry out the activities, measures and business of defence, or protection, defence, relief and other unarmed activities for the protection and defence of the population and material goods under all circumstances (in peacetime and war)" (Javorović 1992: 25–26).

"The civil defence system can be defined as a form of the civil organization of a state and a society for the protection, defence and relief of the population and material goods, society and the ecosystem in the face of all catastrophic forms of threats during peacetime and war, for the creation of a favourable relationship for protection and defence and for unarmed resistance against an attacker" (Javorović 1992: 30).

"Civil defence is the part of defence and protection (in its functional and organizational aspect) that concerns itself with the protection, defence and relief of the population and material goods in the face of natural and technological catastrophes and other major disasters and the consequences of war with the creation of conditions for normal life and work in the areas affected, with the cooperation of the civilian population in an unarmed fight and resistance against the aggressor and with the establishment of conditions for comprehensive defence and protection (surveillance and providing information, support activity by the population, etc.)" (Javorović 1992: 25).

"The expression 'civil defence' refers to that part of the defence-protection activity of society, the priority purpose of which is – through non-military and non-violent means – to protect people, social and personal values, and material and cultural goods, and to ensure the uninterrupted activity of political, economic and cultural life under circumstances unfavourable to the individual or the group, in the face of natural and other disasters, during emergencies and in war. The definition presented differs from those of others primarily in its emphasis on non-military and non-violent civil defence and in the function of civil defence, which is defined in a broader manner, so that in addition to civil protection there may be included economic defence, psychological defence, unarmed forms of resistance and defence-protection measures in the political sphere (i.e., by the authorities)" (Malešič 1992: 130).

From the definitions cited it is not possible to see complete agreement among the various authors. The differences in the definitions point more to the fact that the time during which the definitions arose motivated changes among the authors in their understanding of the concept of civil defence (the differences between the first and other definitions cited are considerable). From the definitions it can be recognized that the authors wished to unite two opposite poles in their definitions: war vs. peace, and the protection of people and relief vs. non-military, unarmed defence. This is also felt by Lawrence J. Vale (1987: 20–23) when he defines and understands among his concepts civil protection, civil defence, home defence, non-violent defence and non-violent resistance to an opponent.

It can be said that the authors have formulated their definitions of civil defence to refer to the change in emphasis from a purely military threat to other sources of threats, especially those that stem from natural and man-made disasters. They take this change into account by including sources of threats (that the society has begun to attach greater significance to) in their definitions of civil defence. Thus they include in the concept of civil defence the activity of the protection and rescue of people and material goods against the consequences of military actions, and natural and man-made disasters, as well as those activities that are primarily oriented toward the defence of the social system against external threats: economic defence, psychological defence, preservation of the continuity of political authority, unarmed forms of resistance to the aggressor, etc. In this manner, the natural and man-made disasters that are included, or the protection and rescue of the population, are in some way inserted into the definition and do not give a real impression of having received their rightful place in these definitions. However, the authors find their reason for including such diverse elements in the definitions in the fact that these are unarmed, non-military forms of response to threats, which they separate from armed, military forms of resistance. Although this is certainly true, the line of separation between armed and unarmed, and between military and non-military, is in the author's opinion an insufficient or incorrect criterion for separation.

The difference ought, I believe, to be sought in whether a particular function or structural element(s) being carried out is primarily oriented toward being carried out and used in war or peacetime. The essential difference is, namely, between the activities and functions that they will carry out during a time of war and those that are primarily carried out during peacetime and that may also be used during war. I believe that it is necessary to find the dividing line precisely with respect to whether the primary application of an element and the primary execution of a particular function is a matter for war or peacetime. In this manner a civil defence system, on the one hand, can be formulated, the function of which is to ensure the continuity of the administrative and political function of the state, to preserve the continuity of the vitally important (i.e., defence) functions of the economic subsystem, psychological defence, the unarmed resistance of the population and so on in war, and the preparations in peacetime for carrying out these functions. As a concept defined in this way, civil defence can be included in the defence system. On the other hand, there is a crystallization of the protection and rescue system.

The application of such a criterion is only possible when total nuclear war between the opposing blocs ceases to be the principle threatening factor. To be more precise, the dividing line between armed and unarmed, and between military and non-military, is a suitable criterion for division when speaking about the security structure of the national security system during the Cold War, under the conditions of the threat of a nuclear attack between the opposing blocs.

In order to support the suitability of this point of view, it is necessary to first of all outline the origin and development of the part of the national security system that the definitions above have referred to as civil defence.

3.1 AN ATTEMPT TO RESOLVE THE QUANDARY OF TERMS THROUGH A HISTORICAL DEVELOPMENTAL OVERVIEW OF CIVIL DEFENCE

To understand the reasons for placing the function of protection and rescue in the defence system (within the civil defence subsystem as in Grizold and the definitions cited earlier, or as an independent subsystem as in Kotnik), it is above all important to be aware of the origins of civil protection and its relationship to civil defence. In this, it is also important to recognize their characteristics in the former SFRY (Socialist Federative Republic of Yugoslavia): namely, civil protection and civil defence were two separate concepts.[3]

The very beginning of these origins will be passed over, and I will focus on the Cold War period. In the menacing confrontation between the opposing blocs, a new strategic defence component developed in European states, in both the East and the West. Most often (in states in both the East and the West) it was called civil defence. Its function was to establish and ensure the conditions for the least impeded operation possible of the agencies of authority, industries important for war and other activities, as well as the protection of the population (known as the "live force") under the conditions of the use of weapons of mass destruction (nuclear, chemical, biological, incendiary devices and conventional long-range weapons). This was to be achieved through the best possible protection of the population and through relief, planned preparation of the economy, stockpiles of strategic materials and food, preparations for the operation of the agencies of authority under conditions of total war, the dispersion of industry across the territory of the country, the construction of industrial facilities below ground, the extension of an early-warning and alarm network for aerial attacks, and so on (Vale 1987:14–23). In Western states the carrying out of the functions of civil defence were predominantly assigned to the ministry of internal affairs, while in the Warsaw Pact countries they were assigned to the ministry of defence. In both cases, the carrying out of these functions demanded the cooperation of all state agencies, the economy and service activities. In the majority of states, civil defence units were also organized, to carry out the function of protection and rescue during war. In the West these were predominantly duty and volunteer units with training centres and equipment warehouses that at the same time served as mobilization centres, while in the East these were predominantly organized as units within the military.

As a rule, these units and their equipment were not intended to carry out the function of protection and rescue in peacetime, but instead for carrying out those tasks that were simply not necessary in peacetime: sheltering (air-raid shelters), black-outs against air raids, mass evacuations, monitoring airspace to sound alarms against air raids, detection and decontamination of nuclear, biological and chemical combat agents, and mass burials of people and livestock. In addition their role in war was to support the services carrying out the function of protection and rescue in peacetime (that is, the tasks of fighting fires, general rescue, medical rescue) - fire rescue service and medical rescue service.[4] Here it is necessary to mention that the functions of protection and rescue in peacetime and in war were often not organized within the same element of the security structure of the national security system. For example, in the SFRY fire fighting was long considered to be a responsibility for internal affairs, medical

[3] In the SFRY the functions of protection and rescue, on the one hand, and all other functions of civil defence (preparing the agencies of authority, the economy, material reserves), on the other hand, were divided. Two organizations arose. The function of protection and rescue in war was to be carried out by an organization called civil protection, and the other function by civil defence. Both were within the defence system.

[4] In number of states the medical rescue service (rescue vehicles and medical technicians) is part of the fire rescue service.

rescue service to be a responsibility for the health authorities and civil protection – as an element that ought to carry out the function of protection and rescue in war – to be part of the defence system.

In all of these cases, as civil defence in NATO and Warsaw Pact member states or as civil protection and civil defence in Yugoslavia, it was this organization that was organized for carrying out its function during war. With respect to its task this is also understandable, and alongside this there arose understandable reasons for positioning civil protection within the framework of civil defence, and both within the defence system.

In Slovenia, soon after it arose civil protection gradually ceased to be "simply a protection and rescue tool for potential war", protected by the provisions of the Geneva Conventions. Conceptually and in a practical sense, civil protection actually became more and more an organization that sought its sense, function, and legitimacy in protection, relief and assistance in non-war conditions, especially during natural disasters,[5] although the type of units and services of civil protection and their prescribed equipment, as well as their actual use or non-use in emergencies, was not always confirmed.[6]

It was most important that the staff of civil protection began to operate in practice as an body that coordinated rescue and other services that encountered one another in resolving various disasters during peacetime (fire departments, medical services, public utilities for supplying water, electricity and telecommunications, volunteer rescue services, and civil protection units and services at various levels, from the local or municipal level to the state or (at that time) republic-wide level).

With the changed security conditions after the end of the Cold War, the function of civil defence (as well as of the armed forces), in both Eastern and Western European states, lost a great deal of its source of legitimacy that had been derived from preparations for war between the opposing military blocs. This explains the erosion of – and, in some states, the complete elimination of – civil defence units (corresponding to Slovenian civil protection) and the preparations of the government and administration and the economy as they were known until the fall of the Berlin Wall.

In this case, Slovenia was in a much better position than the majority of Western and Eastern European states precisely because of the early separation of civil protection and civil defence. Prior to this, Slovenian civil protection had already merged with other rescue services in the protection and rescue system, and did not need preparations for war as the main reason for its existence. In the 1980s in Slovenia, civil protection had already simply become one of the rescue services, the purpose of which was assistance to regular professional and volunteer rescue services (although the type, number, equipping and role of the units and services of civil protection did not fully express the content of the founding concept).

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[5] In an eloquent programme-oriented article by a Slovenian author (Ušeničnik 1982) in the journal *Civilna zaštita*, in which the authors were primarily military personnel, in 1982 gave greater emphasis to carrying out the function of protection and rescue in connection with disasters and not with war. The later contribution by Miran Bogataj (1989) is also clearly in favour of a concept adapted more to disasters than to war.

[6] I was unable to find the reason for this in the literature. The only method of ascertaining the reason for the "civilizing" of civil protection in Slovenia could be seen in the interviews conducted with people who at that time were in responsible professional positions, but I have not (yet) found this. I personally believe that the warehousing of equipment and training of crews that are never used is opposed by every reasonable person, and that there is then a search to sensibly use the equipment, people and knowledge acquired for carrying out protection and rescue in peacetime in the face of natural and man-made disasters.

With this there was achieved, at least at the conceptual level, a reorientation of civil protection as it was known from the time of the Cold War and its orientation toward the non-military civil system-oriented (and not war-oriented) environment. This was different from the area of civil defence, the task of which remained primarily the preparation of the authorities (i.e., state agencies) and economic system for operations during war.

The significant growth in the importance of the function of protection and rescue, showing it to be a separate subsystem, was also emphasized by Božidar Javorović (1992: 15), who states that "In the past 20 years, this area of defence-protection activity [the function of protection and rescue, J.J.] became increasingly important and increasingly developed, so that it assumed the form of a special, relatively complete defence-protection activity and constituted a special part of the civil defence system, which – together with the military and economic defence system – comprised the defence system of a large share of modern states." On the other hand, Malešič, when he speaks about civil protection, says that "in its development, civil protection reached a point that demanded a quality transition to a different state. The transition needed to develop in the direction of a reduced emphasis of its contents on military conditions and a greater orientation toward peacetime disasters as well as in the direction of taking into account professionalism and selectivity in choosing members of the units and staff at the expense of volunteerism and threats. ... It is necessary to place civil protection on a systematic and organizational footing that will enable it to master the functions of announcing disasters, preventative activities, the leadership of rescue and relief activities in the face of disasters and the carrying out of recovery following a disaster" (Malešič 1992:131).

It is exactly this quality transition that in its content means the integrating of all completely civil rescue services (especially the fire service) and civil protection (in Slovenia) or the civil defence units in the majority of Western European countries that I wished to present in Figure 3 as an adapted model for the structure of the national security system in the 1990s. In some states this led to the complete elimination of such civil defence units and the transfer of equipment to civil rescue services, as for example in the Netherlands[7] (Jeraj 1999: 391–395), and in other states to the reduction of units and their reorientation toward relief during peacetime as well as to their merger into one administrative agency (usually within the ministries for internal affairs) that earlier had covered only the operation of the fire rescue service, as for example in Denmark[8] (Jeraj 1998a: 185–190). In Slovenia this transition meant, in a formal sense, the adoption of the *Defence and Protection Act* (*Official Gazette of the RS*, no. 15/91). In it, protection and rescue were for the first time treated separately in a statutory act[9] and for the first time the carrying out of the function of protection and rescue was declaratively established foremost for peacetime and only after that with an orientation for war and, together with civil protection, the other rescue services (fire fighting, mountain rescue, cave rescue, rescue-dog organizations, the Red Cross, scouts, divers and radio-amateurs) were also mentioned for the first time.

The picture of the causes of these changes cannot be complete without also mentioning the changes in the awareness of threats in both the European and Slovenian spheres, changes that

[7] This is clear from the legal definitions under Dutch law from 1996 *(Act on Medical Assistance in Times of Disaster, Fire Service Act, Disasters Act)*.
[8] Defined in the *Danish Preparedness Act* and official representative documents from the Ministry of Internal Affairs from 1994.
[9] In the previous *General People's Defence and Social Self-Protection Act* (*Uradni list SRS* 35/82) only civil protection was defined in a special chapter.

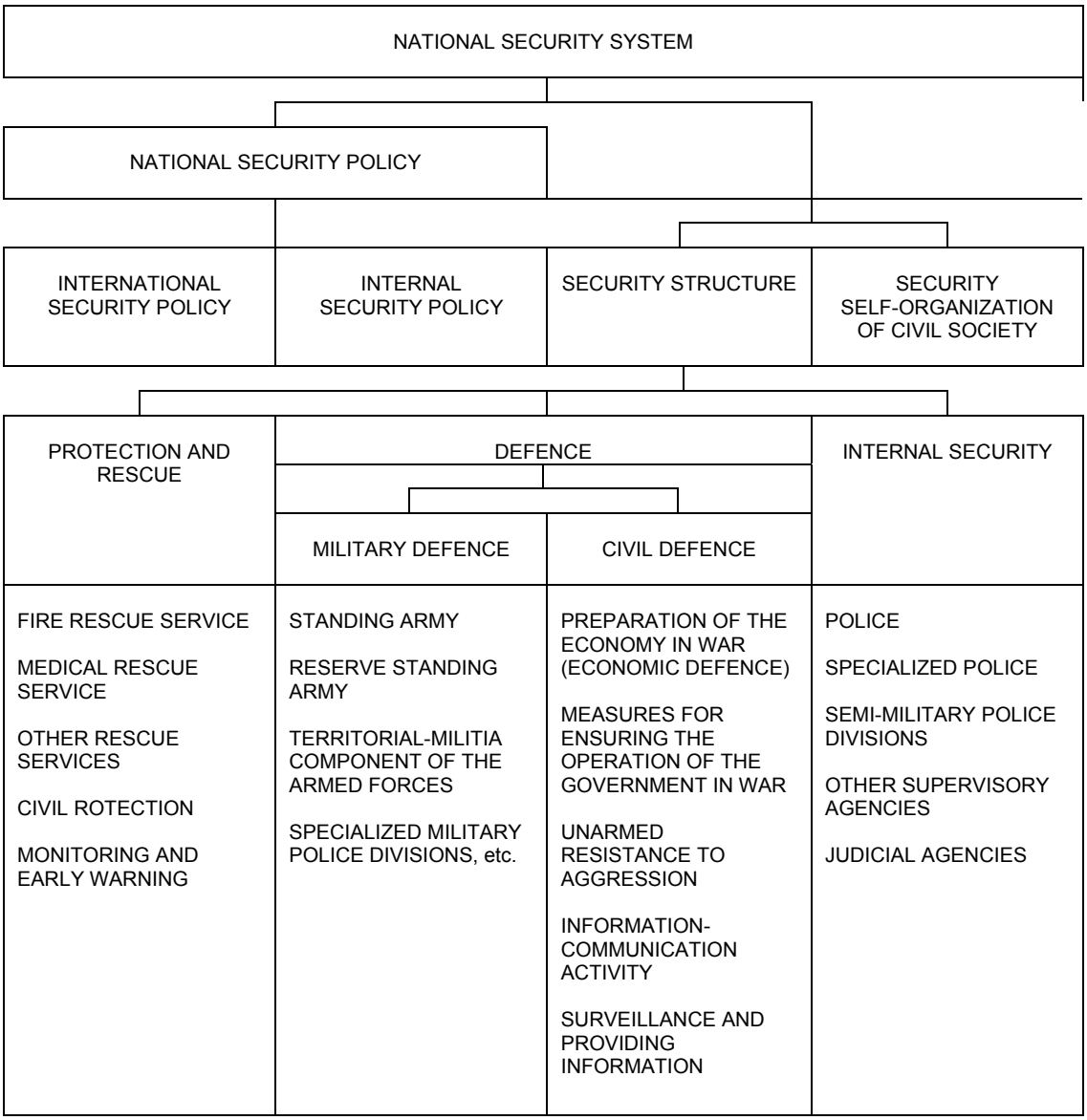
already arose in the 1980s. This concerns the reorientation of the perception of the threats among the public from military to non-military sources of threat, and also to natural and other disasters (Jelušič 1997: 174–182, 1991: 255–256; Jeraj and Hohkraut 1999: 371–372). The symbolic breaking point in this conceptualisation of threat was the accident at Chornobyl in 1986, which stimulated the awareness that organizations and the means at their disposal that were intended to be used in military situations were unable to effectively deal with civil emergencies. The author recalls that none of the early detection and warning systems for nuclear attack were able to recognize the radioactive contamination that was the result of the accident at the Chornobyl nuclear power plant (the increase in radiation was first recognized by Scandinavian nuclear power plants through their emissions detection equipment). This is understandable, because the other instruments were designed and intended to detect the high levels of radiation that would be expected with a nuclear attack. Military and civil defence (in Slovenia, civil protection) instruments were therefore unable to be used, and they had to turn to civil scientific institutions and companies for assistance in discovering the level of radioactive contamination (Delijanić 1990; Čopič and Martinčič 1987; Stritar 1996). In addition, it is also necessary to take into account the developing institutionalised approach to the international resolution of the problems of pollution from carbon oxides and Freon-type gasses. There is also another symbolic breaking point that is less well known. This was the 1988 earthquake in Armenia, which also demonstrated that the means and organizations that were primarily intended to be used during war were for the most part unsuitable for carrying out the function of relief during civil disasters. It was likewise shown that these organizations were not capable of the complex organization of relief operations during disasters,[10] for which it is necessary to manage the work of numerous national and international relief and humanitarian organizations, as well as to provide for the population affected. The difference between military and civil organizational and communicative culture was completely exposed. The organizational collapse that occurred while carrying out relief and humanitarian assistance in this case promoted new thinking and measures for organizing and carrying out protection and rescue in European states and international organizations, especially the UN (Jeraj 1998b, 1998c).

[10] It is instructive to read the description of the conditions, organization and coordination at the time of this earthquake given by Patrick Stanton (1998) as a relief worker that directly participated.

4 STRUCTURAL ELEMENTS AND THEIR FUNCTIONS IN THE NATIONAL SECURITY SYSTEMS OF EUROPEAN STATES IN THE 1990S

If such circumstances in Slovenia and in the majority of (Western) European states are viewed through the lens of a systemic approach, the model of the national security system of (Western) European states in the 1990s can be depicted as shown in Figure 3.

FIGURE 3: THE NATIONAL SECURITY SYSTEM OF (WESTERN) EUROPEAN STATES IN THE 1990S



Source: adapted from Grizold (1999: 10)

Such a new, independent orientation of protection and rescue within the national security system does not mean that protection and rescue no longer have any functional connections with the defence system. Just like the security system in its narrower sense (i.e., the police), the economic system, the state administration system and so on, the protection and rescue system must also perform its role in preparing society for one or another form of military conflict. It can do this in the same way as the other vital social subsystems mentioned above: in the form of an independent system that interacts with others. Nor does the position mentioned signify

any necessity to isolate the protection and rescue function in a separate new organizational part of the state apparatus (separation from the state defence apparatus or ministry of defence in some states, or from the police in other states).

The national security system is thus defined here as one of the social subsystems. Its function within the social system is to ensure, for the operation of the social system, its components and the individual, such conditions or a state that will guarantee their relatively uninterrupted existence, operation and development as well as organizational resistance to threatening factors. On the one hand, the national security system is realized as the establishment, execution and coordination of the internal security policy of individual social subsystems as well as the security self-organisation of civil society. On the other hand, it is realized as the international security policy of the state and individual social subsystems and civil society. Yet again, the national security system is realized in a security subsystem that is relatively clearly evident and delimited from other social subsystems. The security subsystem comprises three subsystems: defence, protection and rescue, and security in the narrower sense (i.e., the police). In their narrower sense the defence and security subsystem are included among the law enforcement apparatus of the state. The defence subsystem is further divided into two subsystems: military and civil defence. Each of these subsystems is realized in specific structural elements, each of which has its own function and structural elements: the organizations that carry out these functions.

The security subsystem in its narrower sense represents the system-internal mechanism of security, and is therefore first of all oriented toward the prevention and resolution of security problems that arise or appear within the social system. More precisely, its function is to prevent the emergence of system-internal menacing factors that threaten the established social system, subsystems and rules of operation through illegal means and methods of behaviour – and to resolve these when they do arise and to penalize their behaviour. Threatening factors are of social origin. They may be individuals, social groups and organizations that use illegal means and methods in their behaviour within society. The best-known structural elements of the security subsystem are primarily the following:

- The police (regular, specialised and semi-military police formations);
- Supervisory agencies (different inspectorate services);
- Prosecutor's agencies;
- Judicial agencies.

Also in its narrower sense, the security subsystem responds to threats that stem from outside the social system, although the functional demarcation between the defence and security subsystems cannot simply be drawn along the system-internal vs. system-external line, but also with regard to the type of and agent responsible for the threat. In its narrower sense, the security subsystem in basis and as a rule is not set up for responding to a threat that would be caused by another social system with its own military force. Such a definition leads to the problem of positioning semi-military police formations (gendarmery). Namely, such formations are, with regard to their size, organization and equipment, equivalent to certain military formations and capable of leading an armed combat in the same manner as a military formation. In actuality, this is a structural element outside the military subsystem that can also carry out the function of armed combat.

Protection and rescue as a subsystem establishes the mechanism that covers the prevention, reduction and elimination of the consequences that arise or could arise due to the operation of factors that physically threaten people, material goods and the environment. These threatening

factors could be natural, caused by man or have a combination of sources. Among natural disasters are earthquakes, tidal waves, storms, hail, sleet, drought, frost and deep snow. Among man-made disasters are traffic accidents, mining accidents, collapsing dams, industrial accidents, nuclear accidents and war. Among combined natural and/or man-made disasters are erosion, floods, landslides, fires, epidemics, epizootics, epiphytotics and infestations (Ušeničnik 1994: 5). To differentiate this subsystem from defence, it is not oriented toward protecting the existing social system as a whole against system-external threats from other social systems particularly through organized physical violence carried out by military forces, and in contrast to security it is not oriented toward protecting the social system, subsystems and operating principles against illegalities. Protection and rescue are thus not positioned within the law enforcement apparatus of the state because, in contrast to security in its narrower sense and defence, with regard to its function and with respect to its structural elements that enable it to carry out its functions, it is not able to engage in physical violence.[11] The most significant elements of protection and rescue are the rescue services (the fire rescue service, the medical rescue service, other rescue services and civil protection). Part of the functions of protection and rescue are realized through clearly evident structural elements (rescue services, monitoring and notification services) and other functions through interaction among social subsystems (e.g., prevention and mitigation). In the formal organizational sense, the protection and rescue subsystem may be organized in the structure of state administration as a relatively independent and uniform whole that has its own structural elements for carrying out its functions and has available or coordinates the use of the structural elements of other social systems. Solutions of placing this function differ from one country to another. It may be organized as part of the ministry of internal affairs, or as part of the ministry of defence or as a ministry of its own, or an independent governmental body or agency.

The defence subsystem represents a dividing line between the social system and its (international) environment, and functions as a mechanism that prevents the action and influence of threatening system-external factors on the entire social system and, as needed, acts against these in an organized manner. It is characterized by an external orientation (with respect to the social system), and its function is primarily to protect the social system against threats that could give rise to another social system, especially through organized armed force carried out by the armed forces. The defence subsystem is composed of the military subsystem and the civil defence subsystem.

The civil defence subsystem is positioned within the national security system as part of the defence subsystem. Its function is to ensure the continuity of the administrative and political function of the state, to preserve the continuity of the vital functions, necessary for defence, of the economic subsystem, psychological defence, the unarmed resistance of the population and other forms of unarmed resistance against the influence of threatening system-external factors on the entire social system. This function expresses itself as preparation during peacetime, ensuring an organized transition from operations in peacetime to operations during war and ensuring for the social system the functioning of the most important (i.e., vital) functions in war. The most significant structural elements of the civil defence subsystem are: activities to prepare the economy for operations during war, preparations for the operation of the political system during war, information-communication activity or psychological defence, and

[11] However, as an element of physical restraint in the case of Slovenia, protection and rescue could assume the civil duty of service in one of the rescue services: civil protection. For the fulfilling of duties, it also possible, under legislation, to forcibly brought an individual who does not want to report to the civil protection duty; which is not done in practice. If it were done, however, forced bringing up an individual would be carried out by the police at the demand of the agency that had enlisted the person doing compulsory civil protection service.

preparations for the operation of other social subsystems during war. The functions of the civil defence subsystem are primarily realized as measures that, on the basis of specific orientations and estimates of the vital needs of the society during war and the possible consequences of war, are adopted by various social subsystems. In the formal-organizational sense, the civil defence subsystem may be organized, or its responsibilities for orienting its measures may lie within the ministry of internal affairs, the ministry of defence or, less often, exist as an independent government body or agency.

The military subsystem is positioned within the national security system as part of the defence subsystem. Its function is to make preparations for and carry out armed combat. The armed forces are the chief structural element of the military subsystem. These may be a standing army, a reserve standing army, a territorial-militia component of the armed forces, specialized military police units, and so on.

In this historical cross-section, the protection and rescue system may therefore be defined as an independent system, the function of which is to ensure the services of protection, relief and assistance to the population in the face of natural and man-made disasters and which can, together with other systems within the national security system, also carry out its function during war. The services of protection, relief and assistance are carried out by various rescue services.

Civil protection is consequently one of the rescue services within the protection and rescue system, the main task of which is to support and complement the other rescue services.

The concept of civil defence reflects all of its content to date except for that part which has passed over to protection and rescue. The essence of civil defence therefore remains in its preparations for economic defence, psychological defence, unarmed forms of resistance and protective measures in the governmental sphere (i.e., among authorities) and in carrying out these activities during war.

In addition to the structural-organizational and functional view of protection and rescue, it is important to throw light on it from the standpoint of legitimacy as well.

5 CONFLICT FOR A SOURCE OF LEGITIMACY: THE LEGITIMACY OF A DEFENCE SYSTEM AFTER THE END OF THE COLD WAR AND FLIRTATION BY THE DEFENCE SYSTEM (MILITARY AND CIVIL DEFENCE) WITH PROTECTION AND RESCUE - CAUSES AND DEVELOPMENT

"The final elimination of tensions between the opposing blocs, the dissolution of the Warsaw Pact, the disappearance of the Soviet Union and the end of the Cold War laid bare those that were faced with a crisis of political legitimacy. Most thoroughly defeated by the easing of tensions and the establishment of hope in Europe was the European military. The Western developed world had buried its Eastern communist foe, and with this had also inflicted a loss on own armed forces" (Jelušič 1997: 11–12) and its own efence system as a whole, and therefore also on the civil defence. The defence system of the countries of Eastern Europe, their armed forces and the entire structure of NATO were no longer able to cite as the source of the legitimacy of their existence preparations for defence against the threat that the entire Warsaw Pact had once represented (in the 1950s, 200 divisions of the Warsaw Pact member states faced off against 50 NATO divisions). With the cessation of such a threat, both the armed forces

themselves as well as all the civil preparations of society for war (state agencies, industry, etc.) in Western European states faced a considerable crisis of legitimacy.

To ensure the legitimacy of their existence and investment in the defence system, it was therefore necessary to find new sources of legitimacy.

The defence system found the first source for the legitimisation or justification of its existence in cooperation with the civil authorities within the state and within the framework of the international community in rescue and relief activities associated with catastrophic disasters. In this they encountered already established solutions in place for ensuring rescue, relief and assistance within states and in the international community (the UN Office for the Coordination of Humanitarian Affairs) with a long tradition from which, for the most part, they were unable to take their legitimacy and transfer it to themselves, because everywhere in Western Europe and in Slovenia as well these are firmly anchored in the local communities. However, this led to progress in making possible the use of new sources within the defence system for the purposes of protection and rescue, which are being used under civil leadership and not that of the military system[12] (Jeraj 1998b, 1998c).

As a response by the European third world on the process of de-legitimising the military in Europe, "Yugoslavia happened" (Jelušič 1997: 12) as well as the destabilization of relations in certain states of the former Soviet Union. This was a new source for legitimising defence systems or, in the narrower sense, the armed forces. In line with such development, the tasks of the defence system (i.e., the armed forces and civil defence) of NATO member states also changed. The new tasks were: defending NATO territory in the case of local conflicts, using the armed forces in the service of international law, peace and security, and supporting the civil authorities in international activities and within the state. This led to a stoppage in the reduction of budgetary expenditures for defence and the formation of smaller, but more highly trained, military units for rapid response (*Defence White Paper 2000*).

With this, the "conflict" for protection and rescue operations as a source of legitimacy among armed forces, civil defence and the system for protection and rescue diminished in the states of Western Europe. The armed forces have their newly defined role. In the new circumstances, the civil defence of these states still represents a useful part of the states' functions, and the equipment which was useful for rescue and relief has been transferred to the protection and rescue system. Civil defence preserves some of the functions of preparing society for (newly defined) armed attacks, and it strengthens the function of psychological defence and the complex participation of the state in resolving local conflicts. The protection and rescue system has been strengthened in Western European states, has achieved a more independent position and has greatly increased its role in participation in international activities of the state by providing international rescue, relief and humanitarian assistance. An important result of this "conflict for legitimacy" is also increased cooperation between all three components, which has led to a synergistic effect, although it has not eliminated rivalry.

This level, in comparison with the West European states, Slovenia reached in certain aspects. In other aspects stepped a bit further, but certain aspect of operrtion of the system still needs much improvement.

[12] It was also defined this way for the Slovenian *Protection Against Natural and Other Disasters Act*, *Uradni list RS* 64/1994.

6 STRUCTURAL ELEMENTS AND THEIR FUNCTIONS IN THE MODERN NATIONAL SECURITY SYSTEMS OF EUROPEAN STATES

6.1 CONFLICT AND CONSENSUS AS A DISTINGUISHING ASPECT

In order to additionally strengthen my efforts to demonstrate the need for a different positioning of protection and rescue, the help of authorities is called upon. I refer to Professor Enrico L. Quarantelli, whom those sociological circles that deal with the phenomenon of disasters recognize as their founding father and who remains a driving force for systematic research in this area.[13] He is the founder of the first centre for disaster research[14] and the founder of the International Research Committee on Disasters within the International Sociological Association, helped create and edits the *International Journal of Mass Emergencies and Disasters*, and is a member of the editorial board of a number of professional journals that cover the area of research on disasters and that have arisen over the past two decades: *Disaster Prevention and Management*, *The Journal of Contingencies and Crisis Management* and *Disasters: Journal of Disaster Studies and Management*. And what does Quarantelli have to say? "There is still a difference of opinion on whether to treat conflictive types of happenings such as wars, riots and civil disturbances, terrorist attacks and hostage takings, and ethnic cleansings and massacres and pogroms as instances of disasters. The dominant view among researchers in the area is that such happenings differ fundamentally from disasters in that in conflict situations, one or more of the involved parties are consciously attempting to continue the crisis or to make the occasion worse for some participants. While conflictive aspects may appear in the later stages of disaster occasions, all those initially involved are interested in bringing the crisis to an end as quickly as possible, a contrast to conflict situations. This growing distinction between *conflict* and non-conflict or *consensus* type crisis situations parallel the growth of such a conceptual differentiation in the social sciences for other kinds of social phenomena" (Quarantelli 2000). From this definition it is not only possible to distinguish the dividing line between protection and rescue and the defence system, but also the dividing line for internal security (civil disturbances, terrorism, etc.), which occurs along the border set up by the difference between conflict- and consensual-type events, which are covered by an individual system within the national security system.

6.2 THE DEVELOPMENT OF PROTECTION AND RESCUE WITHIN PROTECTION AGAINST NATURAL AND OTHER DISASTERS

What, then, is the step forward that was mentioned in the case of Slovenia at the end of the section five and that has appeared in certain other states, especially the US, as well as in the UN system?

This surplus is termed *disaster management* or The System of Protection Against Natural and other Disasters. Qurantelli (2000) says that that which I have termed a step forward is, as a matter of fact, a clearly recognizable trend in disaster management in the majority of states. It concerns an approach that treats a disaster in a broader, more comprehensive manner and

[13] Exceptional respect is also accorded to him by all of us practitioners that have read the material that has come from his pen and that have even had the pleasure to meet and talk with him. His boundless energy, exceptionally lucid perception of the issues and his simple, clear language appeal greatly to us.

[14] In 1963 the Disaster Research Center was founded at the University of Delaware in the United States. To date the centre has carried out over 600 studies of various disasters or individual aspects of them.

divides it into individual phases. This idea was first developed by researchers in the late 1970s, and the typology was later developed by Hillary Whitaker in a project worked out for the US National Governors Association, in which she addressed the disaster management system at the state level in the US. The phases into which she divided a disaster are:

- Mitigation
  This phase includes policy and activities carried out at the time (i.e., immediately), before the actual (or potential) event, the purpose of which is to prevent the possibility of the disaster occurring (i.e., prevention), or to immediately reduce the possible consequences of the disaster so that the event is less intense or less harsh, so that its consequences will be less severe (i.e., mitigation). Examples could include legislation regulating the construction of buildings and other projects, spatial planning, distributing information, training, education and insurance.
- Preparedness
  This phase concerns procedures and measures that are planned and carried out at the time when there is an immediate danger of the occurrence of a disaster in a particular area. Examples include the announcement of messages about the danger and evacuation.
- Response
  This phase includes activities at the time of, during and immediately after the beginning of the disaster. Examples include search and rescue and emergency medical assistance.
- Recovery
  This phase includes activities following rescue and emergency medical assistance. Examples of recovery are the reestablishment of places to live, and the reestablishment of the regular operation of services and the economy.

Disaster management is therefore the path that was also chosen by Slovenia. Function of protection and rescue and relief, together with rescue services and humanitarian services, are no longer the only important thing; for dealing with disasters a new, more comprehensive approach is necessary. With the founding of FEMA (the Federal Emergency Management Agency) in 1979, it was the US that took the first step on this path, according to the information available (Drabek 1991: 5–29). This trend has also been taken up by Slovenian protection and rescue. With the *Protection Against Natural and Other Disasters Act (Official Gazette of the RS* no. 64/94), protection and rescue, at least in the formal sense, has become part of a broader concept referred to as protection against natural and other disasters. In its content this is comparable to the concept of disaster management and – in addition to protection, relief and assistance, together with the rescue services and humanitarian services that these carry out – it includes activities in all of the remaining phases of disaster management. Such a solution was in essence also taken up and confirmed in the *Resolution on the National Security Strategy of the RS (Official Gazette of the RS* no. 56/2001), although in its definitions of civil defence and protection against natural and other disasters certain contradictions arose (Figure 4).

FIGURE 4: THE NATIONAL SECURITY SYSTEM OF THE RS, SUBSYSTEMS, FUNCTIONS AND THE STRUCTURES THAT CARRY OUT THE FUNCTIONS[15]

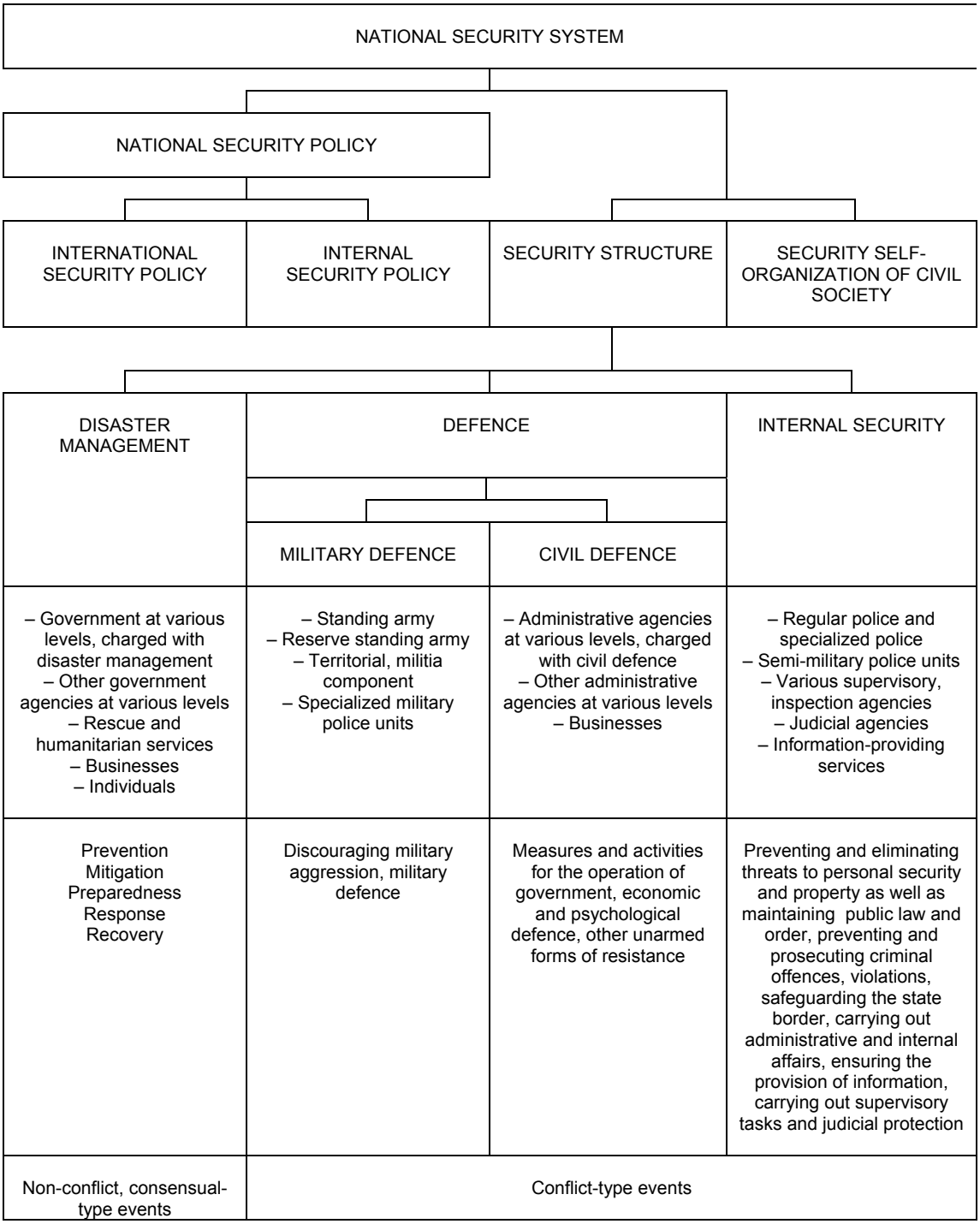
	Subsystems		Functions	Carried out by
National Security System of the Republic of Slovenia	Internal security		Preventing and eliminating threats to personal security and people's property as well as public law and order, criminal offences, violations, safeguarding the state border, carrying out administrative and internal affairs, ensuring the provision of information, carrying out supervisory tasks and judicial protection	Police, state prosecutor, judicial agencies, supervisory and inspectorate agencies
	Protection against natural and other disasters		Mitigation, preparedness, protection, response, ensuring basic living conditions, recovery after natural and other disasters	Managing bodies, rescue services and units, state and local public utility services, national and local administrative agencies, businesses and individuals
	Defence	Military	Discouraging military aggression, military defence of the state	The Slovenian Armed Forces
		Civil	Measures and activities for the operation of agencies of authority, economic defence, psychological defence, other unarmed forms of resistance	Agencies of state and local authority, businesses, institutes and other organizations, citizens

6.3 A MODEL OF A MODERN NATIONAL SECURITY SYSTEM AND THE PLACE OF PROTECTION AGAINST NATURAL AND OTHER DISASTERS WITHIN IT

We will now integrate before mentioned definition of the national security system; its elements, functions and structural elements; and the introduction of the concept of disaster management and, to avoid repetition, present it in the schematic form. Figure 5 illustrates the concept of a model of a modern national security system or, in particular, what subsystems comprise it, what their elements are, who is responsible for carrying out its functions, which functions they carry out and which type of events they are fundamentally oriented toward.

[15] The table was first worked out in August 2001 for the Administration of the RS for Civil Protection and Disaster Relief, and published in the internal materials of the Administration with the title "The Civil Protection System: Placement and Comparisons".

FIGURE 5: A MODERN NATIONAL SECURITY SYSTEM



Source: adapted from Grizold (1999: 10)

7 CONTEMPORARY SYSTEM OF PROTECTION AGAINST NATURAL AND OTHER DISASTERS IN SLOVENIA

Contemporary system of protection against natural and other disasters in Slovenia is well documented in international community. International Seminar on Disaster Management in Slovenia was organised in May this year, official web page contains a lot of information (http://www.mors.si/urszr/eng/index.htm) and basic information is available also in a CEP Handbook (http://www.krisberedskapsmyndigheten.se/english/index.jsp). That is the reason why I will not describe it here. Instead I will present functioning of the system in a municipality.

8 THE SYSTEM OF PROTECTION AGAINST NATURAL AND OTHER DISASTERS IN SLOVENIA ON THE MUNICIPAL LEVEL - THE CASE OF LJUBLJANA

8.1 INTRODUCTION

With some 270.000 inhabitants, Ljubljana belongs to the group of smaller or medium sized European capital cities. Ljubljana is situated at an altitude of 298 m above the sea level, while the hilltop castle in the centre of the city stands at the altitude of 366 m. The highest point in the area of municipality is at 749 m. Ljubljana covers area of 275 km^2. As to the number of inhabitants and the size of the area, Ljubljana is the biggest among the 192 Slovenian municipalities.

Major accidents and disasters have always represented a serious threat to the Ljubljana municipality, its inhabitants and therefore a serious task for municipal government. Floods, landslides, snow-bound, storms, earthquakes, fires, pollution of air, land and water, accidents with dangerous substances, etc. always represent a threat to the people's security, life and health, their property and the environment. Those events may also have secondary consequences which in a highly structured, complex urban system may cause troubles beyond direct physical consequences of accident. We have in mind especially interruption of the (public) services supply: electricity, water, sanitation system, telecommunication system, information technologies, public and other sorts of transport, financial network, supply of food and other necessities etc. None of these events come alone, usually there is a so called 'effect of the falling dominoes' even at the most common natural events: e.g. a blanket of high and heavy snow limits transportation, causes breaking trees and roofs, cars get stacked in snow, trees on the roads make effective ploughing impossible, people are not able to go to work, and the production and public services became limited since it is impossible to cart off wastes, electricity supply is interrupted and consequently the pumps in water supply and sewage system stop working, elevators, lights, traffic control system, kitchen-ranges, computers, refrigerators at homes and in stores are not working, as well as cash dispenser terminals, cash points in stores, etc. Life in a highly structured urbanised environment completely depends upon these self-evident services. We have to be prepared for contingencies, even the most unbelievable ones.

Solution for a part of the problems caused by disasters could be found in organising and functioning of the set of rescue services. But that is not enough. Co-operation, co-ordination and sometimes even sinhronisation between services is needed to achieve synergy. All that with the intent to serve people better for the taxes they pay. Rescue services are only partial solution because they are focused primarily on the rescue. Rescue is only one part, one phase in managing the disasters. To manage disasters we have to have integral, holistic approach to the

threats, potential or manifested through prevention, mitigation, preparedness, rescue, recovery and development.

In the rescue part of The System for Protection Against Natural and Other Disasters of the Ljubljana Municipality[16] different services prepare for and execute common mission. Municipal services, be it professional (paid), voluntary, contracted or civil protection are co-operating closely with national services, especially ambulance service and the Police.

8.1.1 Types of Disasters

Earthquake can affect all territory of the municipality. According to the scientists, major earthquake, with the consequences ranging 8 - 9 degree on the MCS scale, may happen as well. Factors contributing to the increased vulnerability are: areas of soft and liquefaction prone soil, steep slopes on the surroundings of the municipality, hazardous materials in industry and transport, non-earthquake-resistant old buildings, high population density, insufficient construction control and not always proper urban planning.

Minor **floods** occur every year without much trouble. We are experiencing flash and low-land floods in several areas along the two rivers, many brooks and on the marshland. Eventual large floods represent major problem. It is estimated that eleven per cent of the buildings in the municipality could be flooded in this case. Floods occur mainly during the springtime and autumn. In this respect, inadequate urban planning and control caused many problems. Trying to steal flood-land from the nature proofed to be a bad solution.

Landslides usually came along with long lasting and heavy rain in combination with the floods. Steep slopes in the surroundings of the city are prone to this kind of accidents. Specific soil condition and geological structure are additional factors contributing to the risk. Estimations points to some 100 buildings at high risk and additional 1000 in areas with a moderate risk. Here we have to add endangered local roads in those areas. Fortunately all the buildings could not be in danger at the same time.

Wildland fires occur every year in the surroundings of the city, especially in the springtime and summertime. They are mostly due to the negligence. Efficient fire service prevents uncontrolled spreading of the fire.

Snow can cause problems on all territory of the municipality if high enough. Data shows that snow can be up to 140 cm high. Something like that can cause severe problems in public services functioning, transport and consequently hamper the municipal life lines.

Rapid urbanisation clasped before out-of-the-city industry. **Technological** and **industrial** accidents together with their **environmental** impact (hazardous material) can happen in heavily populated areas. If we also add hazardous material in transport (road and rail) and the fact that the municipality is situated on the potable water resources and additionally that the municipality does not collects data on private businesses dealing with hazardous material (even does not have jurisdiction to gather them), we have a alarming situation.

There is a hydroelectric power station upstream of Sava river but calculation shows there is no particular danger to the municipality in the case of **dam accident**.

[16] " The Ljubljana Municipality" and "The City of Ljubljana" are synonymous.

Sleet can be one more problem for all the territory. Consequences can be serious: troubles in traffic, disruption of electricity supply, telephone lines can be damaged, not to mention damage to buildings and trees. And what can we do these days without electricity, telephones and cars? Sleet can severely hamper life in society and cause high economic loss.

Hail, **severe storm**, **strong wind** are also possible events on all territory and consequences can be similar to those of the sleet.

Nuclear power plant and **radiological** accidents in industry and research institutions are possible. We were taught about that in the case of Chernobyl.

Large-scale **traffic accidents** represent a serious problem because of the high number of injured and availability of the medical rescue facilities.

8.2 Disaster Management Department of The Ljubljana Municipality

The Ljubljana municipality has its own system designed for dealing with every day incidents, accidents and for large scale accidents and disasters. Main tasks of The System for Protection Against Natural and Other Disasters are prevention and preparedness, rescue and basic assistance, assuring basic life conditions and renovation and development in the case of large scale accidents, disasters and other crisis situations according to the municipal competence. Within the The System for Protection Against Natural and Other Disasters there is a (sub) system which we call Protection and Rescue System which encompasses all response - rescue services. Disaster Management Department is an administrative body within the municipal administration which is central a point of the System for Protection Against Natural and Other Disasters and responsible for the whole Protection and Rescue System. The department was established in 1995. Its major tasks of are the following:

1. forming of System for Protection Against Natural and Other Disasters and Protection and Rescue System and responsibility for its functioning

1.1. analysing risks and vulnerability
1.2. preparing and adjusting protection and rescue plans
1.3. analysing functioning of the for Protection Against Natural and Other Disasters and Protection and Rescue System
1.4. preparing legal acts
1.5. forming, arranging and co-ordinating work of rescue services
1.6. establishing, equipping and training units, services and bodies of Civil Protection
1.7. including in the PRS, co-financing, equipping and training of voluntary rescue services
1.8. preparing acts for selecting private companies to be included in the Protection and Rescue System
1.9. training inhabitants and mediating information
1.10. assuring system of communications for the needs of Protection and Rescue System
1.11. maintaining public air-raid shelters and keeping record on all air-raid shelters in the Ljubljana municipality
1.12. building and maintaining the system of public alarm system in the Ljubljana municipality
1.13. buying, maintaining and storing material for accommodation of the affected population
1.14. buying, maintaining and storing rescue equipment of units, services and bodies of Civil Protection

2. directing the Protection and Rescue System and executing operative tasks of protection and rescue

2.1. co-ordinating rescue activities and offering logistic support to rescue services
2.2. co-ordinating basic humanitarian assistance to inhabitants
2.3. responsibility for providing rescue assistance from other municipalities and national bodies
2.4. organising and offering rescue assistance to other municipalities
2.5. performing expert and logistic assistance to Civil Protection commander and mayor
2.6. performing activation and mobilisation of forces and resources of the protection and rescue
2.7. concluding rescue procedures and handing over tasks to regular services and bodies.

8.3 The System for Protection Against Natural and Other Disasters of The Ljubljana Municipality

DMS represents overall activities of municipality for all steps of disaster or crisis management: prevention, preparedness, mitigation, rescue and basic assistance, assuring basic life conditions, and renovation and development. Therefore the System for Protection Against Natural and Other Disasters includes all the relevant agents in the municipality, ranging from municipal council, mayor, all departments of municipal administration, public services, private businesses, and individuals. All what is planned and performed in the municipality has to be done with the awareness that territory of Ljubljana is a disaster prone.

Mayor has overall responsibility for the system. He introduces the bill on the organisation of the system to the city council. Furthermore his responsibility is to pass a number of administrative acts regulating the activities of the system in detail. Departments of the municipal administration have the task to assure disaster resistant services, preventive, mitigation and preparedness measures within the field of their respective responsibility, especially concerning municipal life lines. Responsibility of public services is to assure their disaster resistibility and to prepare for prompt restoring of any disruption in providing service to the inhabitants. Municipal public services and city administration are though especially responsible for assuring basic life conditions, renovation and development after a disaster.

8.4 The Protection and Rescue System of The Ljubljana Municipality

The Protection and Rescue System of the Ljubljana municipality includes professional, voluntary organisations and municipal public services, contracted companies, municipal administration and individuals, inhabitants of the Ljubljana municipality.

When performing rescue the principle of system's unity, rationality and progressiveness at deploying rescue services and resources is in place. Basic rescue organisation of the Ljubljana municipality represents a Fire brigade of Ljubljana, with one professional station which closely co-operates with the Urgent medical assistance of the Municipal Health Centre Ljubljana and the national Ambulance Rescue station, and the police. The fastest support to professional one is provided by 35 voluntary fire stations. In the case that rescue intervention demands additional force, knowledge, material and machinery, contractual companies are included. These are companies which have made a contract with the Ljubljana municipality for performing such tasks. These are construction companies and companies, authorised to work with dangerous substances. If necessary, the following groups are included as well: rescue teams of rescue dogs handlers, mountain rescue service, rescue divers and rescue cavers, and in the case of the need for additional communication also amateur radio societies. Help to the inhabitants is offered by voluntary humanitarian organisations, especially Red Cross and Caritas, and the national social service. In the case of extremely serious circumstances, units

and services of municipal Civil Protection are included as well. Total number of available rescue services members is estimated to be some 3.500 persons.

8.4.1 Co-ordination of the Protection and Rescue System of The Ljubljana Municipality

The protection and rescue system of the Ljubljana municipality is organised as a unified system in which all available rescue forces (or forces for protection, rescue and relief as we call them) function in a mutual co-ordination. In this way, the system with its rescue services and the co-ordination system is able to adapt to various circumstances, according to the physical extent and complexity of the consequences.

Co-ordination of the whole system falls within the competence of the Commander of Civil Protection of the Ljubljana municipality. The title 'Commander of Civil Protection' may be misleading, since it does not imply only command of Civil Protection, but co-ordination of all activities and forces for protection, rescue and relief in the Ljubljana municipality. According to the tasks and competence of the commander, the more appropriate term would be commander (or even co-ordinator) of protection, rescue and relief of the Ljubljana municipality.

If characteristics of the event allow, the whole intervention is performed by a competent rescue service. In this case, intervention is led by the commander of the unit or rescue service.

In the case of more complex accidents, the Disaster Management Department co-ordinates the work between the different services and offers a logistic support to the rescue teams and inhabitants.

In the case of large scale accidents co-ordination of the PRS belongs to the commander of Civil Protection of the Ljubljana municipality. He is assisted by his Headquarter of Civil Protection and Disaster Management Department. Commander of Civil Protection of the Ljubljana municipality is also assisted by the Chief Fire Officer when municipal fire service is operational. Further, when units and services of the Civil Protection are mobilised co-ordination is assisted by local (sub-municipal) Headquarters of Civil protection (five of them are covering different parts of the municipality). Voluntary rescue services are co-ordinated by their commanders, and contractual companies by their directors. Municipal public services and agencies are co-ordinated by the competent departments of the city administration, and co-operation with national bodies by their representatives.
In the case of disasters (such as heavy storms, floods or earthquakes) the line of command, or better co-ordination, changes and expands. Different levels of co-ordination has to be established because of the greater number of accident sites and greater number of several sorts of collaborating services, not controllable neither from one place nor by one commander. Command on the local level is taken over by the local Headquarters of Civil Protection. Within the territory of local Headquarters of Civil Protection each accident site is controlled by its own incident commander. Sectoral fire chiefs are also members of these headquarters and in such case they co-ordinate actions of voluntary fire stations with other rescue services.

In a large scale accidents or disasters, co-operation thus requires quite extensive and intensive work. To avoid confusion, co-ordination of the rescue activities is organised on the basis of the in advance defined organisational and operational procedures incorporated in Plans for Protection and Rescue of the Ljubljana municipality - Municipal disaster management plans. Plans are prepared on the basis of estimated risks and vulnerability and available resources

(rescue services, equipment and other resources). Plan-making procedure enables all agents to participate in a plan-building process, so the plans are fully co-ordinated with all rescue and other services. At the present, the following rescue plans are in function.

Plans on protection and rescue in the case of:
- earthquake
- floods
- flash floods and severe storms
- mass-casualty accidents
- wildfire
- large-scale urban fire
- hazardous materials accidents
- large-scale traffic accidents and building collapse

8.4.2 Response data

Number of responses (by municipal services) to the accidents is app. 1.700 per year. Fire service is part of almost every response. Furthermore, almost all responses are done only by fire service. Number of responses when fire service needed additional assistance or were done by other service in year 2002 was twenty-nine. In seven of them personnel of Disaster Management Department took part, in four responses there was a need for contracted construction companies and rescue scuba-divers team and in one response catering company, rescue dog team and technical reconnaissance team were needed (all of them municipal). Nine responses were made solely by unexploded ordnance disposal team (national), five by Mountain rescue service (national), one by national rescue dog team. Of 1.669 responses in year 2003 fire service autonomously performed 1.625. Three times fire service was aided by nationally contracted company when dealing with dangerous substances on waters. Response ratio between municipal and national services on the territory of The City of Ljubljana in year 2003 was 1.654 (municipal) to 15 (national). Responses by police and medical rescue services are stated in chapters 4.3.5 and 4.3.6

8.4.3 Rescue and Other Collaborating Services

8.4.3.1 Fire Service of The Ljubljana Municipality

Public fire service is obligatory local public service to be established by every municipality. Municipality decides and defines how to organise this public service. Voluntary fire societies with their fire stations may perform public fire service only in the case if they fulfil certain conditions and are chosen for performing public service by the competent body of municipality – in the case of the Ljubljana municipality, this is the Disaster Management Department. Of course, local community controls performance of tasks.

On the basis of estimated risk and vulnerability, and especially because of the high level of threat by the floods, storms, accidents with dangerous substances and earthquake, and because of the evaluation that voluntary fire societies may perform their tasks of protection and rescue more effectively than units of Civil Protection, the Ljubljana municipality decided to authorise all 35 voluntary fire societies and their voluntary fire stations, along with the professional fire brigade.
Fire service of the Ljubljana municipality is thus composed of one professional and 35 voluntary stations. Namely, fire service is not responsible only for fire fighting. In accordance with the regulation and according to risks and vulnerability on the territory of the Ljubljana

municipality, they also perform general rescue tasks, rescue in the case of floods, earthquakes, accidents with dangerous substances, storms, high snow, sleet etc.

Fire service of the Ljubljana municipality has one Chief Fire Officer – the commander of the professional fire fighters. He is assisted by his headquarters, composed of the commander and the second commander of Voluntary Fire Association Ljubljana, the sectoral fire chiefs and others.

Professional_fire fighters are above all meant for first response and incident command on the whole territory of the Ljubljana municipality. Voluntary stations are organised into the six sectors. Every voluntary station covers its own territory. In each sector, there is one sectoral fire chief and one sectoral central station, covering its own territory and also the territory of the sector as a whole.

According to the structure and tasks of the fire service, the following demands are made by the Ljubljana municipality to the professional fire brigade: they must be able to turn-out in one minute, to maintain high quality of equipment and high level of professional qualification for commanding and for rescue in all sorts of accidents. Voluntary fire stations, holding the role of sectoral central station, are expected to start rescue activities (in the afternoons, during the nights and on the non-working days) in at least five minutes and during work-hours in 15 minutes. Other voluntary fire stations are expected to start in at least 15 minutes (in the afternoons, during the nights and on the non-working days). All voluntary fire stations are expected to have ability (equipment, qualification) for assuring supply of water, performing external attack, rescue in the case of earthquake, assuring supply of potable water. Certain voluntary fire stations are expected to be qualified and equipped for rescue in the case of floods, co-operation with professional unit when dealing with dangerous substances (especially in rivers), for co-operation with professional unit in the case of traffic accidents. Voluntary fire stations have also a very important role within the preventive activities.

Our objective in the case of fire security is to 'catch the fire when it is still in a pan'. We do not want flames to cut the sky. Thus we have to take care of the planned and co-ordinated functioning of the fire service, adequate fire cover (7 minutes in urban areas and 15 minutes in the country side), control over fire security measures in the community, inform people and companies on fire security, on how to use fire extinguishers, how to act in the case of fire etc.
Usual standard or guideline is ratio of one (professional) fire fighter to 1.000 inhabitants. City of Ljubljana has 0,53 professional fire-fighters to 1.000 inhabitants. If we add 800 volunteer fire fighters we have a ratio of 3,49 fire-fighters to 1.000 inhabitants. We have to bear in mind that there are also additional undermentioned services. Is this too big rescue corps if we compare it with other countries?

8.4.3.2 VOLUNTARY SOCIETIES IN THE PROTECTION AND RESCUE SYSTEM (PRS)
The following voluntary societies and their rescue units co-operate within the PRS:

- Mountaineering rescue service for rescue from high and deep objects and for rescue on the territory difficult of access,
- 4 rescue dog societies for searching with dogs during urban search and rescue, rescue from landslide and avalanches and searching for missing persons in the wild-land,
- Association of boy scouts and Association of Slovenian catholic boy and girl scouts for setting up temporary dwellings,
- 3 radio amateur societies for establishing communication and collecting data on accident, caving club for rescue from high and deep objects and for urban rescue,

- diving club.

8.4.3.3 Contractual Companies within the Protection and Rescue System of The Ljubljana Municipality

There are five companies collaborating in the protection and rescue system on the basis of contracts:

- three construction companies for heavy urban rescue,
- a company authorised for dealing with dangerous substances,
- courier service company,
- catering company for providing food for rescuers and affected inhabitants.

8.4.3.4 Municipal Public Services, Agencies and Other Bodies

The system also includes municipal public services, especially their on-duty services. Co-operation of services listed below is led by municipal Department for public services and traffic:

- water supply
- sanitation
- transport
- road maintenance
- undertaking
- gas supply
- heating.

In accordance with their competence, national agencies, services and economic companies also co-operate in operational tasks of the PRS: electricity supply, road maintenance, telecommunications, etc.

8.4.3.5 Medical rescue service

Co-operation with the Municipal Health Centre Ljubljana as a whole and especially with its Urgent medical assistance and Ambulance service of the Ljubljana clinical hospitals (national) is performed through the Municipal Department for health and social services. Additionally Cupertino is supported by regular contact with Disaster management department and membership of a director of municipal health care in municipal general civil protection staff. Medical rescue service is composed of Urgent medical assistance and Ambulance service. They each have one station. There are 81 medical rescue personnel and 18 specialised doctors. One shift is composed of up to 6 doctors, 30 rescuers and 16 ambulances (20 all together). Average (yearly) response time at responses when life of the patient is threatened is 8,5 minutes. Goal of the service is that they would be able to perform 95 % of all responses within 10 minutes. In year 2002 there was 18.946 class 1 responses (urgent). Eighty percent of those were on the territory of The City of Ljubljana. there were additional 26.874 transports of non-urgent nature made by Ambulance service. Responses where both, Ambulance service and Urgent medical assistance responded together are usually 4.500 to 7.000 per year. Another criteria (additional to response time) is survival rate after cardiac arrest (one year after). In Ljubljana this is 12,4 %. This result is placing us on the upper-middle position in comparison with the EU countries.

8.4.3.6 POLICE

Police is a national service, organised on the Slovenian territory in regional police directorates. Police directorate Ljubljana covers also The City of Ljubljana additional to 32 other municipalities. On the territory of The City of Ljubljana there are five police stations, one of them also with one additional local office. In each police station there is also a criminal investigation team. Additional to those police stations of general nature, there are also mounted police, police dog handlers, traffic police, railway police stations. In year 2002 there were (in the Ljubljana police directorate as a whole) 1.519 police officers and other employees. Co-ordination with the municipal disaster management is performed by the permanent police liaison officer who is member of the municipal general civil protection staff. Police co-operates on the regular basis in the disaster management planning process and in exercising. Eighty percent of police responses in Police directorate Ljubljana is done on the territory of The City of Ljubljana. In 2001 police responded (in the Ljubljana police directorate as a whole) to 36.444 crime offences, 22.268 public order violations and 12.764 traffic accidents.

8.4.3.7 SLOVENIAN ARMED FORCES

Cooperation between the Slovenian army and the municipality on the field of disaster management in practically non-existent. Despite of our endeavours to get a military liaison officer as a member of municipal general civil protection staff we were so far unsuccessful. Noncooperation proved to be very damaging in case of floods in year 1998 in The City of Celje. Even if (and they are) there are response plans in place in the army on the national level that does not mean that people which should work together on the site know each other's abilities, competencies, equipment etc. To assure that Cupertino (planning, exercising) is needed before something happens. That does not mean any predetermination of the procedures on national level used for adoption the decision to deploy army for rescue purposes or not.

8.4.3.8 CIVIL PROTECTION OF THE LJUBLJANA MUNICIPALITY

Units and services of Civil Protection are based on the duty, serving in civil protection is compulsory, meaning that citizens (men in the age 18 to 63 and women in the age 18 to 55) are included on the basis of their legal obligation and are obliged to serve in Civil Protection if called in (same status as army reserve). Number and type of units and service of Civil Protection the municipality is obliged to organise is regulated by national legislation, and regularly inspected by the Ministry of Defence (actually whole PRS is subject to MOD inspections). Main criteria in deciding on number of specific units is number of residents. When this criteria is taken into account than additional criteria - risks - is to be applied and number of civil protection units further added.

This national criteria changed quite a lot during past ten years thus not allowing municipal PRS to settle down. The most interesting example is criteria for first aid units. Ljubljana should have more than 2.176 first aiders in year 1992, 128 in year 1996 and 736 from year 1999 on. Because of their characteristics Civil protection units have quite long response time. Additionally equipping, training and use are expensive. Training, exercising and use is expensive particularly because municipality have obligation to repay the wages to the employer of the civil protection member while he or she attended any activities in the working time. In year 2002 this compensation per person per day was in average 63 EUR with the extremes from 16,5 to 124 EUR. After called in rate of civil protection personnel respond to a call is in average 70 %. Half of them usually make demands upon financial compensation. In the next table there are stated some (!) of civil protection units which Ljubljana should have according

to national regulations and costs for their equipment and basic training. Prices are in EUR and without taxes and do not include regular every year refreshment training, exercises, equipment maintenance, storing etc.

TABLE 1: CIVIL PROTECTION UNITS - EXPENSES

	No. of units	No. of persons	Personal equipment	Equipment of the unit	All equipment together	Basic training	Training and equipment
First aid, platoon	23	736	1.023.648	428.004	1.451.652	731.818	2.183.470
Urban search; platoon	2	36	58.507	196.424	254.930	5.745	260.676
Urban rescue; company	2	140	426.749	?	426.749	30.075	456.824
NBC deco; squad	14	168	414.746	1.029.730	1.444.475	45.112	1.489.587
Air-raid shelter service	55	109	277.194	0	277.194	24.773	301.967
Civil protection commissioners	133	266	433.312	114.156	547.468	125.947	673.415

If we allow ourselves some simplification than we can say that civil protection unit means that somebody in the municipal administration who is charged with the municipal PRS take a citizen out of the data base, call him (or her) to the office on the interview where he try to establish previous skills and knowledge, than register him as a member of a certain unit. After that basic and refreshing training has to be organised, personal protection equipment given and equipment of the unit (bought, stored, maintained and given), exercises organised. When you really need the unit to respond to an accident members have to be called in by telephone (or via other communication means, radio, television, courier - whatever you can think of), taking possession of the equipment of the unit organised as well as transportation to the accident site, all logistics (fuel, food, maintenance ...) and than they can possibly be send off but they will not have professional or at least very good trained leaders. You have to insure them against accident, reimburse the income to their employee and bare costs if they have an accident, become ill or, God forbid, become invalids or die.

Big costs, long response time, a lot of other (above mentioned) difficulties and fact that civil protection units are rarely needed and used, all that guides us towards using voluntary associations or private companies instead. It is cheaper and quicker - more effective. We have to rethink very carefully the reasonableness of each type of civil protection unit (if service, provided by particular unit is really needed, how many times and in what scope). We have to reconsider how to ensure quicker, organisationally easier, more efficient and cheaper providing of services now provided by civil protection units. We have to evaluate if criteria how many different civil protection units municipality is obliged to have and how many of each specific type of unit.

That statement does not apply to the municipal and local civil protection staff and civil protection commander(s). Both together form invaluable rescue services co-ordination tool. But it is still true that the name is not appropriate regarding that co-ordination of all rescue services and not only civil protection is what they do.

8.4.4 ALARM SYSTEM

Technically, alarm system consists of electronic sirens, linked in a network and connected to the professional fire station and 112 control rooms. Renewal of this system was concluded in year 2002. The municipality is responsible for financing the alarm system. The use of it falls within the competence of the fire service (in the case of immediate danger to the population due to the accidents with hazardous materials, fire), the Civil Protection commander (in the stated and other cases in the peace time), and the national bodies (in the case of war time (air-raid)). In some cases signals can be used to alarm voluntary fire-fighters. There are three basic signals: warning of danger, immediate danger and end of danger (also used for siren test). Immediately after siren signal, message have to be mediated through radio and/or television, explaining the reasons for signal to be used and steps to be taken by inhabitants.

8.4.5 MONITORING

Municipality has no automated accident monitoring systems on its own. At the present the only exception is monitoring of air quality. Data we are using is coming from national monitoring and early warning systems on meteorological, hydrological, seismological, radiological, ecological, health and other conditions. In the case of an immediate danger of disaster or during its course, a data-collection network (mostly regarding the consequences) is established by the relevant services with radio-amateurs as a base of the network.

8.4.6 DISASTER AWARENESS CAMPAIGNS

Volunteer organisations, incorporated in PRS, hold an important role in the building up disaster awareness. They educate their young members, have presentations in the general public, etc. We also support national disaster awareness campaigns and run our own campaigns. When running campaigns, we use leaflets, brochures and other material provided by national bodies, but we also prepare materials by ourselves. Latest examples are cube and a colouring book for children in a fire reduction programme and brochure "Be prepared" for households. Rescue services exercises as a public presentation of rescue activities also contribute to the aim.

8.4.7 FUNDING

Financing that part of Protection and rescue system which is direct responsibility of Disaster management department of The City of Ljubljana (fire service, contracted voluntary associations and private firms, civil protection, public air-raid shelters, sirens, informing and education public etc) is done primarily (85 %) by the municipal budget. In year 2002 this was more than 4 million EUR and represented 1,7 % of total municipal budget. Usually this is some 2 % in EU countries. It is not possible to state an exact number because voluntary associations invest money they collect as charity to rescue too (and we do not collect that data).

Table 2: LJUBLJANA'S PROTECTION AND RESCUE – BUDGET

Financial sources for Ljubljana's protection and rescue (2002):	EUR	%
Municipal budget	3.523.000	84,7
Insurance companies	404.000	9,7
National budget	234.000	5,6
	4.161.000	100

In year 2002 City of Ljubljana spent a bit less than for million EUR for fire service (2,6 million EUR labour and 1,3 million EUR equipment, maintenance etc.) and other stakeholders (without medical rescue) 0,6 million EUR (0,2 million EUR labour and 0,4 million EUR equipment,

maintenance etc.). Funds for fire service are 87 % of all funds. Let's remember that fire service does 99 % of the response.

Table 3: LJUBLJANA'S PROTECTION AND RESCUE – BUDGET DISTRIBUTION

Finances distribution for Ljubljana's protection and rescue (2002):	EUR
Personnel	2.830.000
Other (equipment etc)	1.739.000
	4.569.000

Table 4: LJUBLJANA'S FIRE SERVICE – BUDGET DISTRIBUTION

Finances distribution in the Fire service budget (2002):	EUR
fire service personnel	2.591.000
Other (equipment etc)	1.333.000
	3.924.000

Table 5: LJUBLJANA'S DISASTER MANAGEMENT DEPARTMENT – BUDGET DISTRIBUTION

Finances distribution in the Disaster management department's budget (2002):	EUR
personnel	239.000
equipment	94.000
training	45.000
maintenance	119.000
voluntary societies	36.000
other	9.000
sirens (2002)	102.000
	644.000

City of Ljubljana with its 270.000 inhabitants (only permanent residents without temporary residents, tourists, students, commuters, customers) spent (2002) 15 EUR per inhabitant for rescue purposes.

8.4.8 Co-operation at the National and International Level

PRS of Ljubljana municipality has an extensive co-operational network with other Slovenian cities, intended for exchanging experiences and providing mutual assistance.
As a capital of Slovenia, Ljubljana maintains strong connections with other capital cities in Europe and some world wide. Within this framework exchange of experiences in the field of disaster management is in progress. An active membership in the international organisation Local Authorities Confronting Disasters and Emergencies (LACDE) is of a special importance. Two persons from the Disaster Management Department are involved in Crisis Management Europe Project which is lead by Centre for Crisis Management Research and Training (CRISMART) at the Swedish National Defence College. Additionally, our rescuers are regular members of Slovenian international assistance projects. We regularly organise international search dog exercises and take part in exercises throughout Europe.

Urban Search and Rescue Unit is a basic unit for assistance in Slovenia and abroad of the Ljubljana municipality. There are 50 members but the number can be increased, specially in the search dog team. It is possible to deploy the whole unit or specific components. Unit is able to locate trapped people, rescue them, provide basic medical assistance, and also to accommodate and provide food for up to 200 people. Deployment time is up to eight hours. Conveyance is usually made by road. Vehicles can also be mounted on the train. Upgrade for air transport is possible as well. Decision whether or not to deploy (or tender) the unit as an assistance is the mayor's decision (financial reasons). Request for assistance should be made through regional notification centre (112). Request is transmitted to the duty officer of the Disaster Management Department who will make necessary contacts with the competent authorities within the municipality.

CONCLUSION AND RECOMENDATIONS

The time covered in this study was divided into three periods:

- The time of the Cold War, which was characterized by the expectation of a possible attack between the opposing blocs, total war, with nuclear war as the chief source of threat in the European and broader area;
- The time after the fall of the Berlin Wall, which expressed itself in the point of view that war in the form that had previously threatened no longer represented a credible source of threat, so that the main sources of threat were economic, social and ecological; in Western Europe this period could be referred to as the time of cashing in on the peace dividend;
- The current time, which is characterized by sources of threats such as terrorism, local ethnic conflicts and, as before, economic, social and ecological sources of threat.

The first period is characterized by a bipolar security structure: on the one hand there was a complex defence system with military and civil elements that had the function of ensuring external security; on the other hand there was the internal security system. The function that is of greatest interest is the function of protection and rescue, and during this time it had an important role in the civil part of the defence system, normally as part of civil defence, oriented toward carrying out activities during war. At the same time the function of protection and rescue also existed in peacetime. It was carried out by structural elements that in the organizational sense belonged to the internal security system. The reason that the existence of the function of protection and rescue in peacetime is not mentioned in models is probably because the threat of a confrontation between the opposing blocs was so great that no other source of threat was significant.

The period of cashing in on the peace dividend introduced the crisis of the legitimacy of everything within the national security system that had based its existence exclusively on the confrontation between opposing blocs. This category also includes that part of civil defence that was not able to justify its existence through usefulness in neutralizing those sources of threats that had become significant. This was an opportunity for the pooling of elements that were oriented toward carrying out the function of protection and rescue in peacetime with those that were oriented toward carrying out the same functions during war (and whose use during peacetime was possible and reasonable).

The third period brought armed attacks back to the surface as a threat that had to be taken into account. However, the threat was not the kind that demanded the formation of special elements for carrying out the function of protection and rescue during war. This time, the basis for these

changes were concealed elsewhere. Greater significance was assigned to a different understanding of disasters and dealing with them. The concept of disaster management has come into play. The understanding of a disaster goes beyond the idea that a disaster is equivalent to the relief operations carried out by the emergency services. Disaster management thus includes the phase before the disaster (mitigation, preparedness), at the time of and immediately following the disaster (response) and after the disaster (recovery). Such a concept demands the planned inclusion of a large number of elements for carrying out the function of disaster management, which is much broader than the previously treated function of protection and rescue. An additional reason why it was decided in the final module to show disaster management as a completely separate subsystem also lies in the fact that it differentiates itself from the other two with regard to the criteria of the conflict vs. non-conflict events that it covers in its operations.

The changed security conditions in Europe have therefore had substantial effects on the area that was sometimes covered by civil defence (civil defence and civil protection in Slovenia) in European countries. Slovenia had several advantages in adapting to these changes. The first such advantage was the early separation of the areas of civil defence and civil protection. The next advantage Slovenia had was in the development of civil protection to the protection and rescue system, which means that civil protection became one of the rescue services within the protection and rescue system. The final, fundamental advantage that Slovenia had was the development of the protection and rescue system within the system for protection against natural and other disasters, which encompasses not only rescue services and with this the functions of protection, relief and assistance, but also represents an attempt at disaster management. The changes in various states practically took place in such a way that they tried to achieve the "civilizing" of the rescue part of civil defence, the allocation of these units and their equipment to fire rescue and other civil rescue units, the merging of the administrative agencies that had covered the fire rescue and rescue component of civil defence, and the police, so as to create a cluster of those emergency services, united within one administrative agency (most often in the ministry of internal affairs), that most frequently must carry out emergency services together or at least in close cooperation within the broad spectrum of minor and major disasters. Such an agency is usually named the *crisis or disaster or emergency management agency*.

From the point of more operational perspective, as we tried to achieve with the example of Ljubljana, we can say that not even one accident is the same as the other and that is the reason why response system has to be flexible. That also means that it is difficult if not inappropriate to organise such a system in a strictly hierarchical manner. We strongly believe that a network of different stakeholders (services, authorities, etc.) is a better way for efficient prevention, mitigation, preparedness, response and recovery. It is true that building-up a strong and wide network is a demanding and long-lasting process which is actually never finished but this is also the way modern civil society functions. And disaster management system has to reflect, follow the way of society. Furthermore, with network dealing with disasters we try to achieve the goal that all phases of disaster management cycle would be a matter of concern of the whole society not only of a few rescue services and local government authorities. We consider such a way as a natural one because disasters affect individuals, firms, groups, so they need a chance to be included, to be part of all phases of disaster management cycle.

It is difficult to give recommendations since circumstances in each county are specific, different. Nevertheless here are some general ideas which were, if taken into account,

beneficial for building-up disaster management system in Slovenia. Unfortunately, we became aware of some of those ideas in a hard way – because of the problems we did and still face.

The basic starting point in building or changing any governmental institution or organisation should be: citizen is the king.

For the tax they pay citizens have their right to receive most efficient and effective service possible to provide. Everything has to be observed through that, through the benefit of the citizen and regardless of what is good for bureaucracy and institutions.

Define task, goal, and motto for what you are doing.

Use what exists, lives in the society; respect for the tradition.

Independent analysis on how (organisation, quality, etc.) rescue, emergency management, disaster management is performed at a given time, who is doing the job etc. is beneficial. It gives an idea of where the starting point for change is.

Asking how job can be done better with existing resources. Solution can usually be found in cooperation, coordination, integration, synergy

Keeping what is not need is waste of money. Concentrate scarce resources on the action which will solve most of the problems. It is not possible to solve all problems.

Definition of standards of service for the citizens, making them public and conducting permanent assessment brings clarity.

Finding out what is needed (knowledge, training, organisation, equipment) to achieve the standards is next step.

Steady and balanced (levels, services) upgrading prevents organisational crisis (constant change makes a lot of problems).

Human resources management is the key to every change and is base for the success.

Legal regulations (laws, decrees, etc.) by themselves will not make much of a difference if rescuers on the field will not have better knowledge, training, organisation, equipment and other support.

Whatever we intend to do we have to ask ourselves – what good will that bring to the citizens and how will improve working conditions of the rescuers on the scene. Next step is defining how this improvement will be measured, measuring, analysing and correcting.

Admitting “my idea of the way of change is not working well” takes courage but it is welcomed.

Newer ever neglect voices from the operational bottom of the organisation.

Being greedy trying to get lot of jurisdiction, competences and load too many responsibilities on your organisation. Acting like this one can make a lot of institutional and personal enemies

and additionally bring work for which one's organisation is not best at. It is better to promote cooperation.

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